Installation and User's Guide

FireBall™
DIGITAL MUSIC MANAGER
E-40 AND E-120

and

FireBall™
DIGITAL MUSIC MANAGER

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About This Manual

This combination installation and user's manual serves as a step-by-step guide to setting up the FireBall system developed and shipped by Escient. Chapter 2 shows you how to set up and connect FireBall to your other equipment, while the rest of the Chapters show you how to use FireBall for your music enjoyment.

Record Your Serial Number

The serial number for this unit is located at the rear of the device. Please record the serial number in the space provided below. Refer to it whenever you call upon your Escient dealer regarding this product.

FireBall Serial No. _____

Copyright

This manual is the copyrighted property of Escient. Any use or reproduction of this manual in any form without the expressed written permission of Escient is a violation of copyright laws. ©2000 - 2003 Escient.

The notes icon is shown throughout this manual. It indicates a tip or an additional piece of information that could prove useful.

Warranty Information

Terms of Coverage - Each Escient branded music management system sold comes with a standard one (1) year warranty. This warranty provides no-charge coverage under normal product usage, for a period of one year from the date of registration and/or purchase (whichever is earlier). This warranty program provides the following key features and benefits:

•   Twelve (12) months service, parts and labor.
•   Five (5) day turn around time on all standard in-warranty repairs. No charges to the customer other than in-bound shipping charges which are determined by the shipping method. All return shipments will be via Standard Ground Transportation (approximately 5 business days).
•   Twelve (12) months of regular hour telephone support (9AM to 7PM EST), Monday through Friday.
•   24-hour email response from the Escient Support Website.
•   Free software upgrades for a period of twelve (12) months. 24-hour on-line software maintenance updates provided via a broadband or dial-up telephone connection.
•   Access to 24-hour music database (CDDB) and entertainment services providing access to over a million CD titles and associated information.

What is Covered - The goal of this warranty is to cover operational problems that might arise with your product during normal use. This includes failure to start, improper operation, or intermittent failures. As part of the warranty, Escient will pay for all labor and materials used in the repair of the system. Escient reserves the right to use new or factory refurbished parts in the repair of these in-warranty systems.

Escient will also pay for the return shipment of the repaired system via standard ground transportation.

At Escient's discretion, the Company will repair or replace any system sent in for repair. Upon repair, the product will be new or like-new in condition and will meet all necessary regulatory requirements.

What is Not Covered - Escient products are sold through Escient approved dealers. A number of items must remain intact in order for Escient to verify and validate this warranty. Additionally, there are several conditions which violate Escient's warranty program. These include:

• The product was not purchased through an approved Escient Dealer.
• Any product, on which the serial numbers has been defaced, modified or removed physically or electronically will not be covered by an Escient warranty.
• Escient will not cover under warranty damage to the product as a result of accident, misuse, abuse, neglect, fire, water, lightning, or other acts of God or nature, improper storage, unauthorized modification, or failure to follow instructions.
• Any type of unauthorized repair or modifications made to the system resulting in damage to the product will not be covered under this warranty.
• Damage caused to the product as a result of improper shipping or installation.
• Any problems related to the use of the product which is not a direct problem with the product.
• Damage caused to the product as a result of improper installation to third party peripherals or products, or incorrect connection to peripheral or products.

Additionally, Escient does not cover the following items under the terms or its warranty programs:
• Installation or removal charges.
• Cost of initial technical adjustments (setup costs).
• Battery replacement.

Escient's sole liability for any defective product is limited to the repair or replacement of the product at our discretion. Escient shall not be liable for damages to other property caused by defects in this product, damages based upon inconvenience, loss of use of the product, loss of time or data, commercial loss or any other damages, whether real, incidental or consequential.

How to Return a Product - Contact your dealer or Escient's Customer Support group at 800-372-4368. Please have the following information ready for your dealer or Escient's Customer Support technician.

•   Product Serial Number
•   Model Number
•   Date of Registration or Purchase
•   Place of Purchase

Upon reviewing the request for repair under warranty provisions, Escient's Technical Support group will issue a Return Material Authorization (RMA) number. This number is to be attached to the outside of the shipping carton. Additional instructions will be provided by technical support.

Please be sure to use original packing carton and internal packing materials to assure proper shipment of the system. Insurance costs are the responsibility of the customer. Most shippers only provide standard coverage for $100 in cost so please protect yourself by providing additional insurance for the returned product.

Out of Warranty Repair - Escient provides out of warranty repair service on a cost plus labor basis. Minimum charges will apply. Technical support will provide information on this service at the time of the call.

Regulatory Statements

''**NOTICE:** The Industry Canada label identifies certified equipment. This certification means that the equipment meets telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Caution: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.''

''**NOTICE:** The **Ringer Equivalence Number** (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed 5.''

Additional information regarding this statement may be found in Appendix B.

Trademarks & Service Marks

Escient and the Escient logo are registered trademarks of Escient.

FireBall and Physital are trademarks of Escient®.

Other product names mentioned herein are used for identification purposes only and may be trademarks of their respective companies.

CD-related data from Gracenote CDDB®, copyright ©1999 - 2003 Gracenote. CDDB is a registered trademark of Gracenote. The Gracenote logo and the Gracenote CDDB logo are trademarks of Gracenote. Music Recognition Service and MRS are service marks of Gracenote.

Enhanced entertainment services are provided under the OpenGlobe™ name, by Escient. These services provide the ability to explore new music, learn about artists and their influences, purchase new music, movies, and more.

Escient Privacy Policy

Escient is committed to providing you with a product that you enjoy and are confident in using, and are committed to providing services in a private and secure environment.

We recognize and respect each individual user's privacy and have created this Privacy Policy to demonstrate our commitment to your privacy.
We want you to be fully informed about the information that we collect, why we collect it, and with whom we share it.

It is our hope that, after reading this notice, you will understand our commitment to privacy and be confident that we will use your information responsibly. By using the Escient FireBall, you are accepting the practices described in this Privacy Policy.

The option to read the Escient Privacy Policy appears on the zip code screen of the Quick Start automatic setup procedure.

In addition, you can access the statement at any time by pressing the SETUP key and choosing the option: **user information, privacy policy**.

Cautions & Warnings

Caution: To reduce the risk of electric shock, do not remove the cover. No user serviceable parts are inside. Refer servicing to qualified service personnel.

Caution: To prevent electric shock, do not use a 3 wire to 2 wire adapter plug.
A 3 prong outlet is required.

Caution: You are cautioned that any change or modification not expressly approved in this manual or approved in writing by an authorized representative of Escient could void your warranty and/or your authority to operate this equipment.

Caution: Prolonged use of any video device which produces a static (non-moving, non-changing) or repetitive image on your projector, television or plasma display device can cause "screen burn-in". You are encouraged to leave the FireBall screen-saver turned on and set to the lowest possible "time-out" duration.
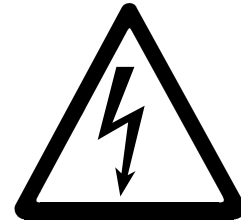
Important Safety Instructions

• Read these instructions.

• Keep these instructions.

• Heed all warnings.

• Follow all instructions.

• Do not use this apparatus near water.

• Clean only with a dry cloth.

• Do not block any ventilation openings.

• Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

• Do not defeat the safety purpose of the grounding-type plug. A grounding type plug has two blades and a third grounding prong. The third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

• Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

• Only use the attachments/accessories specified by the manufacturer.

• Unplug this apparatus during lightning storms or when unused for long periods of time.

• Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

• The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

• WARNING To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

Manual Disclaimers

At the time of printing, the FireBall screen shot images in this manual matched the FireBall interface screens. However, since FireBall has the capability of downloading software updates and enhancements on a regular basis, the resulting screen updates may no longer match the images in this manual. Check the Escient website for any updates.

Limits

The FireBall system has the following maximum limits:

• Up to 300 tracks can be selected at a time to record from a connected changer.
• Up to 250 tracks on an MP3 CD in the front panel drive are displayed and are selectable for playback and record.
• Unlimited playlists can be created and saved.
• Up to 200 tracks can be added to a Playlist
• Up to 300 tracks can be selected at a time in Pipeline for transfer from the PC to FireBall.

Terms and Definitions

Following are terms used throughout this manual.

- **Autobuild -** the process where FireBall reads each CD in your changer(s) and acquires the cover, title, and track information to build your music library.

- **Button** - refers to a graphic item on the display screen.

- **Encode** - to format electronic data (music data) into a standard format like MP3.

- **Group** – a collection of similar music titles. Standard groups are provided (such as groups based on genre) and custom groups can be created. For example, within the Music Guide, groups contain a collection of CD's, recorded CD's, or custom Playlists organized automatically by genre or manually by the user.

- **Highlight** – highlighting is used to indicate the user's selection on screen. When the selection moves up, down, left, or right, the highlight moves to the next nearest item. No action is taken except that more information may be displayed on the screen, until the Select key is pressed.

- **Info text area** – the portion of the guide screen used to display information about the highlighted title.

- **Key** - refers to one of the buttons on your remote or keyboard.

- **MP3** - a compressed digital audio format. MP3 files are smaller than the original CD tracks and sound almost identical.

- **Playlist** – a custom Music title made up of tracks from one or more titles – in effect, a custom CD.

- **Rip** - the process of recording CD audio tracks to the internal hard drive.

- **Selected** – the result of pressing the PLAY or SELECT key to activate the highlighted title, track, or program.

- **Source** – any one of the primary modes of operation –iRadio or Music.

- **Title** – a collection of music tracks.

- **Track** – single song from a CD, collection of MP3s, or a Playlist. Tracks are typically organized into Titles.

- **WAV**– an uncompressed audio file format. WAV files are temporarily created before they are compressed into MP3 files. If you choose the **uncompressed** bit rate for your music recording preferences, uncompressed tracks are stored in the WAV format.

Contact Information

Escient may be contacted by using the following information. Once you have worked with your local Escient dealer, we encourage you to contact us if you are in need of any further assistance.

Escient
6325 Digital Way
Indianapolis, Indiana 46278
Phone: 800-372-4368 Press "2" for Sales, or "3" for Support
Hours: Monday - Friday 9:00am - 7pm EST
Fax: 317-616-6790
www.escient.com
E-mail: support@escient.com

Please visit the Escient website at www.escient.com for the current product updates, technical information, and document updates.

The website is also the most convenient method for accessing information, 7 days a week, 24 hours a day.

Chapter 2-Setting Up FireBall

2

Unpack The Equipment

❶   Carefully unpack all of the FireBall equipment from the shipping container.

❷   Next, compare it to the following list and make sure you have everything available before you get started.
- FireBall unit packed in plastic bag
- Wireless keyboard with 3 AA batteries
- Escient 48 button remote control with 2 AA batteries
- Detachable A/C Power Cord - 6'
- S-Video cable (Y-C) - 5'
- Composite Video cable - 5'
- Phone cable - 20'
- S-Link mono cable - 10'
- Dual RCA cable - 5'
- User/Installation Manual
- Open Me First Guide
- Open Me Second Guide
- Ethernet cable - 10' (FireBall E only)

Since no two people are likely to have the same exact audio or video configuration, the steps involved in putting the FireBall system together are not specific to any one piece of audio or video equipment. Therefore, it may be necessary for you to customize one or more of the cables that are included with this equipment. Please see Appendix A for a cable pin-out configuration guide.

Depending upon the intricacy of the audio and video equipment and the access to each component, installation should take approximately 2-4 hours.

A complete list of the optional equipment such as CD Changers and Portable Players may be found on the Escient website.

Unpack The Equipment (continued)

Optional items:

- Escient Touch Screen: Model ETP-1000
- Escient Broadband Kit (HPNA to Ethernet Bridge)
- RS-232 Communication Cables (for changers or control systems)
- FireBall Rack Mount Kit (available from Middle Atlantic at http://www.middleatlantic.com or 973-839-1011)
- Optical Digital Audio Cable (1 for each changer)
- Analog audio RCA cables (left and right) for analog recording
- Escient MP-100 Digital Music Players
- Escient Pipeline Software - allows editing of FireBall data (such as playlists, song names, groups) on a PC. Also allows sending MP3s from desktop to a FireBall.

- Ethernet router/gateway for Broadband Internet connections

What Else Is Needed

In order for FireBall to function properly, you will need to provide the following items:

❶ A video source such as a television, monitor, VGA projector or touch screen.

❷ Stereo receiver, CD changers (optional), speakers, and other associated audio equipment.

❸ Available Internet access through an Internet Service Provider (ISP): standard telephone dial-up or broadband connection such as a cable modem or DSL. **In order to take full advantage of the ground breaking entertainment services provided through FireBall, the preferred method of connection is Broadband (T1, Cable Modem, DSL or ISDN).** FireBall supports many dial-up Internet Service Providers (ISPs). Most Free ISPs do not use standard, consistent methods of Internet connectivity and do not open their networks to outside users. Therefore, these cannot be used with FireBall in a dial-up connection. A special offer for AOL internet service is available through the FireBall Quick Start setup screens.

During the Quick Setup procedure in Chapter 3, you will be asked for information regarding your (ISP) Internet Service Provider.

If you are using dialup, please contact your ISP for the following information.

- Dialing Number
- Login Name
- Login Password
- Name of ISP

FireBall Back Panel Reviewed

Review the back panel of the FireBall unit and the associated cabling.

Please note that audio and video ports on the back panel of the actual FireBall unit are labeled and color-coded.

Note: FireBall E back panel is on the following page...

FireBall E Back Panel Reviewed

Review the back panel of the FireBall E unit and the associated cabling.
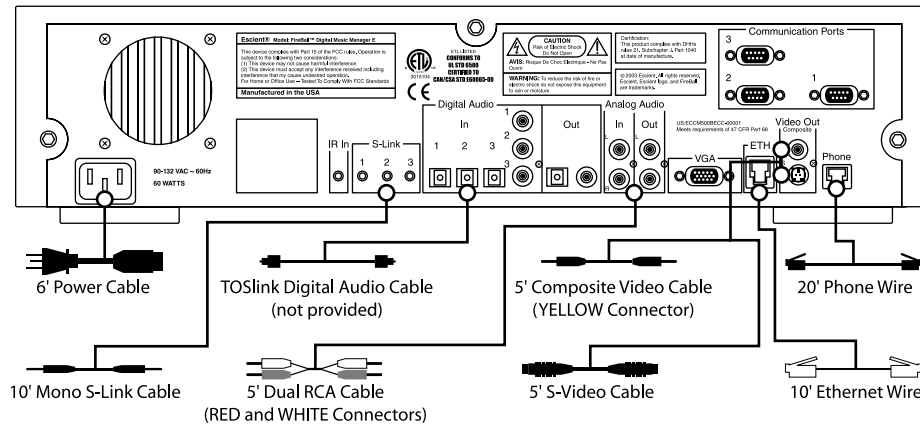
6' Power Cable

TOSlink Digital Audio Cable
(not provided)

5' Composite Video Cable
(YELLOW Connector)

20' Phone Wire

10' Mono S-Link Cable

5' Dual RCA Cable
(RED and WHITE Connectors)

5' S-Video Cable

10' Ethernet Wire

Please note that audio and video ports on the back panel of the actual FireBall unit are labeled and color-coded.

Connecting FireBall to a Composite TV or Monitor

❶   Use the **Composite Video Cable**, which can be
identified through its yellow colored connectors.

Composite Video Cable
(YELLOW Connector)

The cables you receive are black.
The connectors on the cables are
the only portions that are "colored."

❷   Connect one end of the cable to the **FireBall Video Out (Composite) port.**

FIREBALL
BACK PANEL

Video Out
Composite

S

TV or MONITOR
BACK PANEL

INPUTS
L
R   VIDEO
Y   Cr   Cb

Composite Video Cable
(YELLOW Connector)

If connecting FireBall to a TV or
AV Receiver, there may be several
VIDEO IN ports. Use a VIDEO
IN port that is not currently being
utilized. Also, be sure to inform
your client which port is connected
to FireBall so that the appropriate
video input selection can be made
to access FireBall.

❸   Connect the other end of the cable to the **Video In (Composite) port on your
TV or AV Receiver.**

Connecting FireBall to an S-Video TV or Monitor

❶   Use the **S-Video Cable**, which can be identified as a
     gold cup connector with tiny pins inside.

S-Video Cable

Whenever possible, use the S-Video cable to connect FireBall to a TV or AV Receiver. S-Video will provide better image quality than Composite video.

❷   Connect one end of the cable to the **FireBall Video Out (S-Video) port.**

FIREBALL
BACK PANEL

Video Out
Composite
S

S-Video TV or MONITOR
BACK PANEL

INPUTS
L   R   VIDEO
Y   Cr   Cb
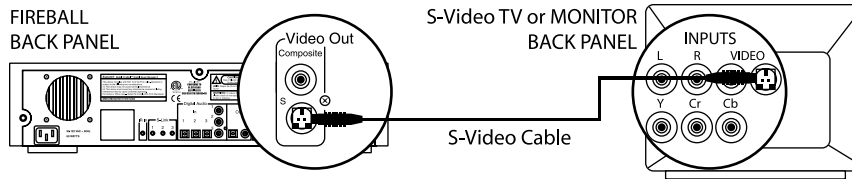
S-Video Cable

❸   Connect the other end of the cable to the **S-Video In port on your TV or AV
     Receiver.**

Connecting FireBall to a VGA Projector, Monitor or Touch Screen.

❶ Use a VGA cable.

(Not supplied with FireBall.)

VGA Cable

If you are connecting to a VGA Projector or Monitor, you will need to supply your own VGA cable (must be less than 25 feet).

The Escient ETP-1000 includes the proper VGA cable.

❷ Connect one end of the cable to the **FireBall VGA port.**

FIREBALL
BACK PANEL

VGA MONITOR or PROJECTOR
BACK PANEL

VGA
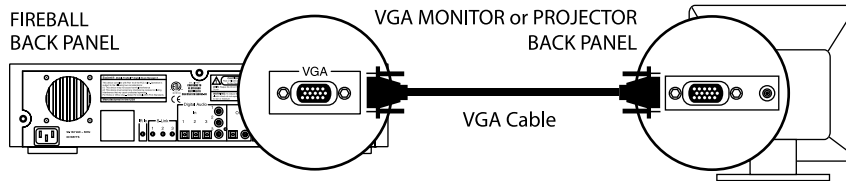
VGA Cable

❸ Connect the other end of the cable to the **VGA port on your VGA device.**

About Connecting Audio

FireBall does not contain an amplifier nor does it contain speakers, so it will be necessary for you to have your FireBall attached to a stereo receiver or to amplified speakers. Follow your particular manufacturer's instructions for this hookup procedure.

You may also be attaching audio connections and control cables from a cd changer to the FireBall unit. To take full advantage of the digital capabilities of your music management system and for best audio performance, please use the appropriate cables for your particular devices.

FireBall is equipped with input and output ports:
- 1 set of stereo analog audio outputs
- 1 set of stereo analog audio inputs
- 1 coax digital output
- 1 optical digital output
- 3 coax digital inputs
- 3 optical digital inputs

What CD Changers are Supported?

The following changers with digital audio ouputs are currently supported by FireBall. **Please check the Escient website for the latest list of supported CD Changers, as this list is updated periodically.**

- Sony CD Changers (CDPCX-220, 300, or 400 series)
- Pioneer DVD Changer (DVF07)
- Kenwood DVD Changers: (DV-5900M, DV-5050M)

When support for more changer models becomes compatible, you can use the SETUP->UTILITIES->UPDATE SOFTWARE menu to download compatible FireBall software over the Internet connection. Please refer to Chapter 8 for instructions.

FireBall will access only the CDs located in changers which support both DVD and CD discs. DVDs will not be recognized.

During the automatic Quick Start setup procedure, FireBall checks for any supported CD Changers. If CD changers are found, the appropriate internal settings will be made to setup the changer for play, record, and control. For example, if a supported changer is detected, the digital and analog inputs are reserved for this changer's use and will not show up as an External Input in the Music Guide.

Connecting CD Changer(s) Overview

In order for FireBall to control an external changer, a data-control cable must be connected between each changer and FireBall. Changers can be connected to FireBall in a variety of ways.

- Sony changers are connected using standard S-Link cables.
- Kenwood and Pioneer changers are connected using RS-232 cables.

In order for FireBall to manage the audio signal path from each changer, an audio cable must be connected between each changer and FireBall. Changers can be connected using either digital coax or digital optical cables.

- Sony changers usually have only optical connectors
- Kenwood and Pioneer changers have both digital coax and digital optical connectors.

You should not interact with the front panel of your changer except to load and unload discs.

Connecting Sony Changers

Up to 3 Sony changers can be connected to FireBall using individual standard S-Link cables.

❶   Use the S-Link cable (1/8" male mini-plug on each end).

Mono S-Link Cable

If you need more S-Link cables, use 6' - 8' standard & mono 1/8" mini-jack cables. Do not exceed 10' in length.
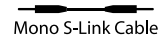
❷   Connect one end of the cable to the **FireBall S-Link (number 1)** port.

FIREBALL BACK PANEL   SONY CHANGER BACK PANEL

Digital Audio

In   Out
1 2 3

S-Link
1 2 3

LINE OUT CONTROL A1 II COMAND MODE DIGITAL OUT Optical

TOSlink Cable

Mono S-Link Cable

SCMS encoded discs cannot be recorded using the digital connections to FireBall. Analog audio connections must be used for this purpose.
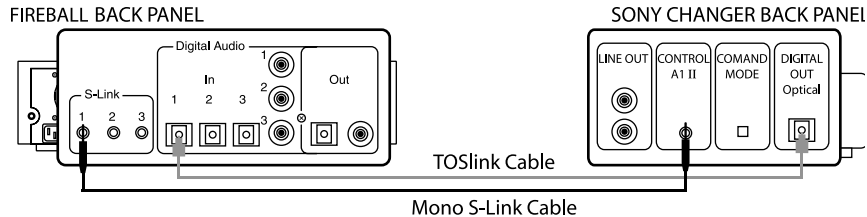
❸   Connect the other end of the cable to the **S-Link port on your Sony changer.**

IMPORTANT:
Using a TOSlink optical digital Cable, connect the Digital Audio Out from your Sony Changer to the Digital Audio In Port on FireBall. This connection is necessary for CD Playback and MP3 recording.

Connecting Multiple Sony Changers

To connect additional Sony changers, repeat steps 1 through 3 using S-Link Ports 2 and 3.

FIREBALL BACK PANEL   MULTIPLE SONY CHANGER BACK PANELS

TOSlink Cables
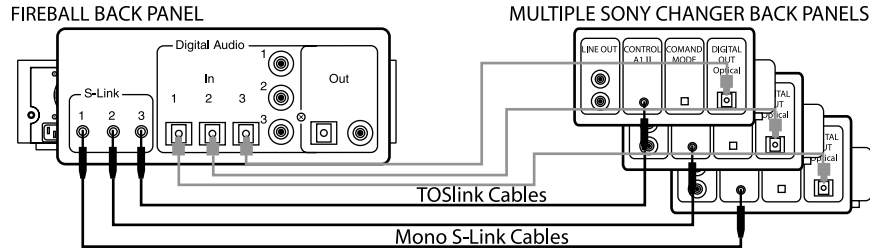
Mono S-Link Cables

IMPORTANT:

Using a TOSlink Cable, connect the Digital Audio Out from your Sony Changer to the Digital Audio In Port on FireBall. This connection is necessary for CD Playback and MP3 recording.

If you need more S-Link cables, use 6' - 8' standard & mono 1/8" mini-jack cables. Do not exceed 10' in length.

SCMS encoded discs cannot be recorded using the digital connections to FireBall. Analog audio connections must be used for this purpose.

❶ **Set CD Control on all Sony Changers to 1.** This is either a switch setting on the back of the changer or a front panel menu selection. Please refer to your Sony manual for instructions.

❷ Connect audio from each CD Changer to FireBall. Connections using optical cables to the digital ports will produce the highest quality audio. Escient recommends also connecting the analog audio outputs to FireBall in the event you wish to record SCMS encoded disks. If both analog and digital audio connections are enabled, FireBall will automatically select the best playback/record mode for each disc.

❸ Sony 300 and 400 disc changers should be set to "CONTROL A1 II" mode. Please consult your changer's user manual for instructions on how to set this mode.

Note: If the menu display on the Sony changer reads "CONTROL A1?" press NO to set it into the proper mode. If the menu display reads "CONTROL A1 II?" press YES to set it into the proper mode.

When installing digital audio inputs and S-Link input to FireBall, make sure S-Link 1 and Digital Audio 1 are from Changer 1, S-Link 2 and Digital Audio 2 are from Changer 2, etc.

Analog audio from multiple Sony changers can be daisy chained from most Sony Changers to the single FireBall analog audio input.

Connecting Pioneer Changers

❶   Use an RS-232 cable (not supplied with FireBall) with connectors made specifically so that one end connector fits the pin configuration for FireBall and the other end connector fits the pin configuration for your specific CD changer. Refer to Appendix A for the pin configurations.

❷   Insert one end of the cable (the FireBall connector end) into an RS-232 COM port on FireBall. There are 3 available COM ports.

❸   Insert the other end of the cable (the connector that fits the CD Changer) into the RS-232 port on the CD Changer.

❹   To connect additional CD changers, repeat steps 1 through 3 using the other COM ports.

❺   Connect audio from each CD Changer to FireBall. Connections using optical cables to the digital ports will produce the highest quality audio.

❻   Make sure the changer is powered on.

Refer to Appendix A for cable pin-out configurations.

When connecting digital audio inputs to FireBall, make sure Digital Audio 1 is from Changer 1, Digital Audio 2 is from Changer 2, and Digital Audio 3 is from Changer 3.

Connecting Kenwood Changers

❶ Use the RS-232 cable which is supplied with the Kenwood changer

❷ Insert one end of the cable (the FireBall connector end) into an RS-232 COM port on FireBall.

❸ Insert the other end of the cable (the connector that fits the Kenwood Changer) into the RS-232 port on the first Kenwood Changer.

❹ To connect additional Kenwood changers, connect a stereo 1/8" cable (not included with FireBall) from changer 1 to changer 2, and from changer 2 to changer 3 using the DAISY CHAIN CONTROL ports. FireBall will support up to 3 Kenwood changers connected in this manor.

❺ Connect the coaxial digital output from the first changer to the digital coaxial input 1 on FireBall.

❻ If you have more than 1 Kenwood changer, you will need to daisy-chain the digital coax audio from each changer into the fist changer. Connect the coaxial digital output of the second changer to the coaxial digital input on the first changer. Do the same for a third Kenwood changer, connecting it to the coaxial digital input on the second changer.

Connecting Digital Audio

❶   Use a Fiber Optic Cable or a Digital Coax Cable (not supplied).

❷   Insert one end of the cable into the FireBall Digital Coax or Optical Input Port.
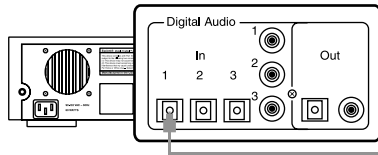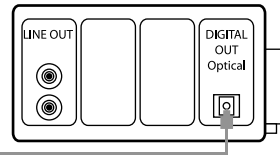
❸   Insert the other end of the cable into the Digital Output port on your changer.

❹   To connect additional CD changers, repeat steps 1 through 3 using the additional FireBall digital audio ports provided.

❺   Connect audio from each CD Changer to FireBall. Just be sure to connect a similar type audio input port on FireBall to an audio output port on the changer.

Connecting Devices Using the IR Input

❶   Insert an appropriate IR cable that will connect to the 1/8" mini connector on the back of the FireBall Unit.

❷   Insert the other end of the IR cable into the IR out port on your device.
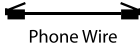
The Kenwood and Pioneer DVD changers have both Digital Coax Out and TOSLink ports and could be connected through either type of cabling.

Sony changers must have matching S-Link and Optical Digital Audio ports. For example: the first Sony changer must use S-Link port 1 **and** Optical Digital port 1. The second Sony changer must use S-Link port 2 and Optical Digital port 2, etc...

Connecting to the Internet using the Internal Modem

FireBall contains an internal modem that can be used to connect to the Internet for retrieving information such as music data, cover art, and entertainment services.

❶ Use the **Telephone Cable.**

Phone Wire

(Can be identified by see-through connectors. This

is the smaller of the two cables with see-through

connectors, also known as an RJ-11 cable)

❷ Connect one end of the telephone cable to the **FireBall Phone (modem jack).**

FIREBALL
BACK PANEL

TELEPHONE WALL JACK

Phone   HPNA

Phone Wire
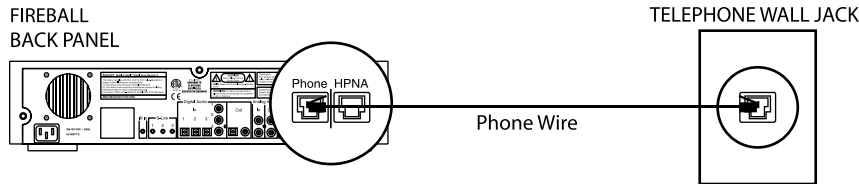
❸ Connect the other end of the telephone cable to the **Telephone Wall Jack.**

FireBall is designed to automatically connect and disconnect from the Internet as needed. A list describing when Internet connections occur can be found in Appendix E.
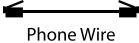
The preferred method of connecting to the Internet is Broadband (either Cable Modem or DSL).

If you have a network with a gateway to the Internet, FireBall allows you to connect through a broadband connection such as Cable Modem or DSL service. This may require the use of optional network equipment. Please consult your Escient Dealer for details.

Connecting to HPNA Networks (FireBall)

FireBall has an HPNA jack that can be used to connect to the internet through and HPNA enabled PC with Internet connection sharing. (Minimum and maximum length cabling requirements are found in Appendix G - Home Networking.)

❶ Use the **Telephone Cable.**

Phone Wire

(Can be identified by see-through connectors. This

is the smaller of the two cables with see-through

connectors, also known as an RJ-11 cable)

❷ Connect one end of the telephone cable to the **FireBall HPNA jack.**

FIREBALL
BACK PANEL

TELEPHONE WALL JACK

Phone   HPNA

Phone Wire
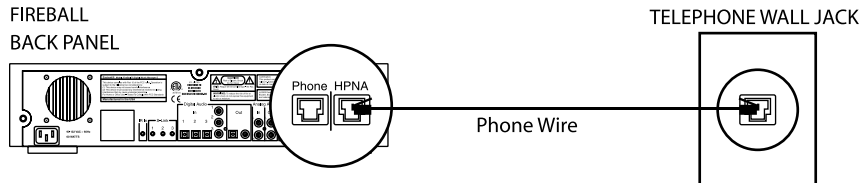
❸ Connect the other end of the telephone cable to a **Telephone Wall Jack.**

Connecting to the Internet using Ethernet requires an HPNA to Ethernet Bridge, such as the Escient Broadband Kit. In addition, certain minimum and maximum length cabling requirements must be met. Please see Appendix G - Home Networking for additional information.

Connecting to Broadband Networks (FireBall E)

FireBall-E has an Ethernet jack that can be used to connect to the internet through a broadband internet connection such as a Cable Modem or DSL line, or through a standard Ethernet LAN.

❶   Use the **Ethernet Cable.**

         Ethernet Wire

         (Can be identified by see-through connectors. This

         is the larger of the two cables with see-through

         connectors, also known as an RJ-45 cable)
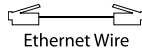
❷   Connect one end of the ethernet cable to the **FireBall Ethernet jack.**

FIREBALL E 40 AND E 120
BACK PANEL
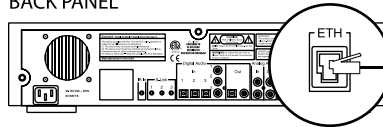
ETHERNET WALL JACK

ETH
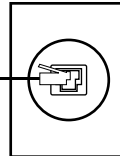
Ethernet Wire

❸   Connect the other end of the ethernet cable to an **Ethernet network.**

The preferred method of connecting to the Internet is Broadband (either Cable Modem or DSL).

Connecting to Third Party Control Systems

Three RS-232 serial ports are available on FireBall. You can use one of these ports to control FireBall from an external home theater or whole house control system.

FireBall is compatible with AMX and Crestron RS-232 control systems. Additional equipment may be supported. Please check the Escient website for an updated list of compatible control systems.*

The RS-232 cable needed to connect FireBall to any of these models is dependent upon the model's RS-232 pin configuration, and therefore the cable may have to be custom-made. In most cases this will be a DB-9 Null Modem Cable (refer to Appendix A).

❶   Find the RS-232 pin configuration for your Control System model in Appendix A of this manual.

❷   Contact a Custom Cable Supplier to make a cable for your particular configuration.

❸   Connect one end of this cable to the FireBall RS-232 communication Port.

❹   Connect the other end of this cable to the RS-232 communication port on your Control System.

* Control and Audio Distribution system models that can integrate with FireBall are updated periodically and may not be reflected in this particular manual.

Please consult your Dealer or the Escient website if you wish to use a control system not specified in this manual.

Connecting an Escient Touch Screen

Three RS-232 serial ports are available on FireBall. You can use one of these ports to control FireBall from the optional Escient ETP-1000 Touch Screen.

Other touch screen systems may be compatible. Please contact your dealer for more information.

The RS-232 cable needed to connect FireBall to the Escient ETP-1000 touch screen is included with the touch screen.

❶   Connect one end of this cable to the FireBall RS-232 communication Port.

❷   Connect the other end of this cable to the RS-232 communication port on the ETP-1000 touch panel.

Please consult your Dealer or the Escient website if you wish to use a touch screen not specified in this manual.

Connecting the Power Cord

❶   Use the **Power Cord**.

Power Cable

❷   Connect one end of power cord to the **FireBall AC Port (plug).**

FIREBALL BACK PANEL

120 V ELECTRICAL OUTLET

Power Cable
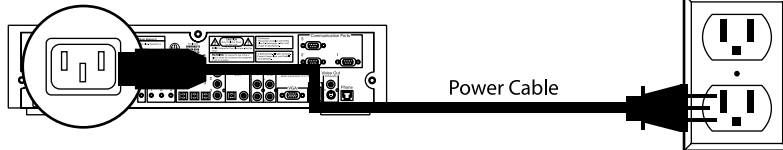
❸   Connect the other end of the power cord to a 120V electrical outlet.
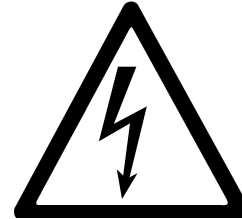
Caution: To prevent electric shock, do not use a 3 wire to 2 wire adapter plug. A 3 prong outlet is required.

It is recommended to connect the power cord to a UPS, surge supressor, or directly to a wall outlet. NEVER CONNECT THE POWER CORD TO A SWITCHED OUTLET.

FireBall Power States: On, Standby, Off

After the FireBall unit is plugged in, the Standby LED located next to the power button will flash until the startup process is complete. **Please wait. This may take several minutes depending on the size of your music collection**.

When the Standby LED is solid ON, the FireBall is now in a standby or "sleep" mode. There is no video output when FireBall is in standby mode and the front panel display is off. Press the Power button (on the front panel or on the remote) once and the video output and front panel display will turn on. The unit is now ON.

To change from the ON mode back to the standby or "sleep" mode, press the Power button on the front panel or on the remote once.

If power is removed from FireBall for any reason, including a power outage or if the unit is unplugged, FireBall will automatically return to the Standby state as soon as power is restored. When FireBall is turned on again, FireBall will return to the same source mode that it was in when power was lost.

To force the FireBall to restart, PRESS and HOLD the Power button for 4 seconds, and release it when the standby LED starts blinking. When the Standby LED is solid on and FireBall has completed its startup process, press the Power button once to turn on the FireBall.

Please follow the guidelines regarding Power ON and Power Standby procedures.

FireBall has four power states:

1. **ON - you will see video output on your display.**

2. **STARTING (flashing LED)**

3. **STANDBY or SLEEP - no video output, the Power LED is lit constant, powered but not running.**

4. **OFF - unplugged from the wall.**

Chapter 3 - Getting Started

3

Front Panel Basics
Using the Remote Control
Text Entry Via the FireBall Remote Control
What Is The Setup Process?
Running Quick Start
Guided Tour Through Quick Start
Run the Autobuild Process
Inserting and Removing Discs
Adding or Removing Changers
Using the Front Panel, Remote, Keyboard or Touch Screen
Overview of User Interface

Front Panel Basics

You can access most of the features of FireBall through the front panel, but this is not the recommended method since some options are not available through the front panel. For instance, the SETUP and OPTION features are not available through the front panel.
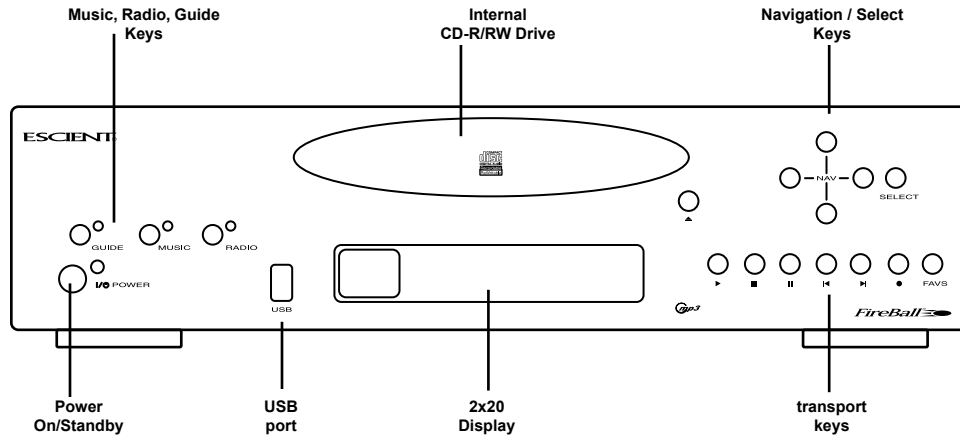
Using the Remote Control

The FireBall IR remote is a Universal remote control with capabilities to control other Escient products, as well as 5 other common home theater sources.

SOURCE KEYS **-** puts the remote into each of the following modes:

> **AUX** - all others
> **CBL** - cable convertors
> **DVD** - DVD player
> **TV** - Television
> **FB** - FireBall
> **TB** - TuneBase 200
> **PP** - not used
> **RCV** - receivers or stereo tuners (TNR=RCV on remote)

GUIDE - toggles between the Guide and Player screen.

INFO - used to toggle the type of details you see on your screen. For instance, if you're in player mode the cover art would be replaced with track times. This is also used to toggle "select all tracks/select no tracks" under the current title when you are in Delete Music mode, Transfer to Portable mode, Create/Edit Playlist mode, Create/Edit Group mode, and in the Record screens.

POWER - operates on the currently selected source and turns the unit to standby.

MODE - toggles through the different play modes.

SETUP - shows FireBall's setup menu for making system-wide changes.

Power Key
Source Keys
Mode Key
Setup Key
Option Key
OpenGlobe Key
Guide Key
View Key
Info Key
FireBall Navigation & Control Keys
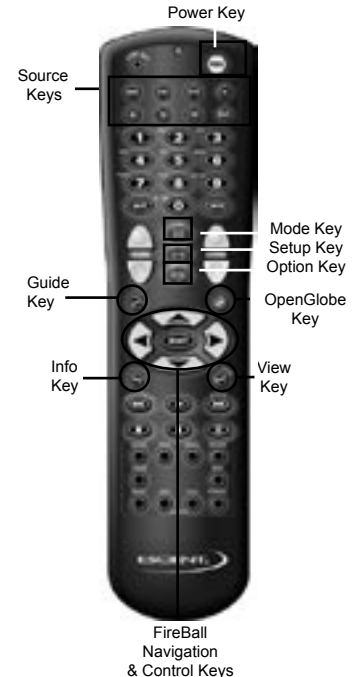
OPTION - brings up the OPTIONS screen for the current Guide or Player.

OPENGLOBE - takes you to the CE-Commerce screens to allow you to browse and purchase music and movies using your FireBall.

VIEW - toggles the Guide screen Views through Artist, Music, Song, and Cover views.

Navigation Keys - the **UP, DOWN, LEFT,** and **RIGHT ARROW** keys are used to navigate and highlight items, while the **SELECT** key is used to accept the currently highlighted item.

Power Key

Source Keys

Mode Key
Setup Key
Option Key

Guide Key

OpenGlobe Key

Info Key

View Key

FireBall Navigation & Control Keys
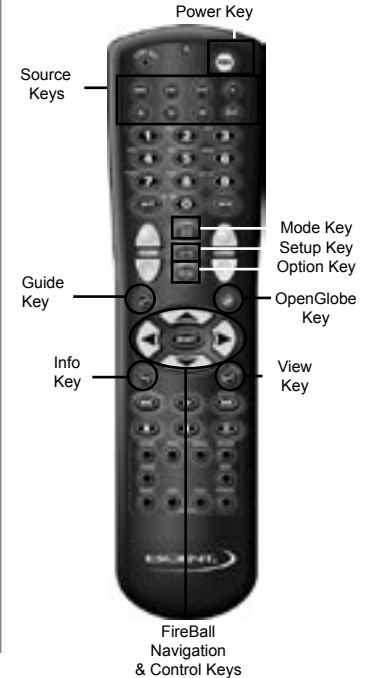
NUMERIC/TEXT keypad - allows you to enter text and numbers. Both text and numbers are active at all times unless only numeric data can be accepted at that time. An on-screen indicator will show you when only numeric data will be accepted. Text entry is described later in this section.

VOLUME - turns the volume up or down for the current source (See Appendix H.).

CH/PAGE up and **down** keys are used to page full screens in the Guide or Player.

TRANSPORT Controls:

The **BACKSPACE** key operates as a standard Previous Track key when it is pressed once by starting the current track over. Pressing the key again within two seconds will skip back to the previous track. Pressing and holding this key will perform a scan backwards and you will hear the music as it scans back at high speed. This key is also used as the Backspace key when entering text in a text box such as on the registration screen. Finally this key can also be used as the back button when browsing the OpenGlobe CE-Commerce opportunities.

The **PLAY** key causes the currently highlighted item in the Guide or the Player to be played. This key is also used to clear all of the text in a text box.

Numeric/Text Keypad

Volume Control

CH Page

Transport Controls:
Previous Track/Rewind
Play
Next Track/Fast Forward
Record
Stop
Pause
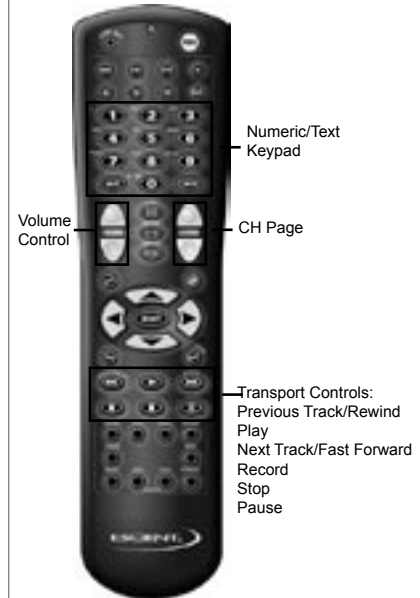
The **SPACE** key operates as a standard Next Track key when it is pressed by advancing to the start of the next track. Pressing and holding this key will perform a scan forward and you will hear the music as it scans forwardat high speed. This key is also used as the Space key when entering text in a text box such as on the registration screen. Finally this key can also be used as the Forward key when browsing the OpenGlobe CE-Commerce opportunities.

The **RECORD** key is used in the Music Guide and Music Player screens to select the currently highlighted CD to be recorded to digital format to the hard disc. This key is also used as a Save button to commit changes made on many screens throughout FireBall.

The **STOP** key is used to stop music that is currently playing. This key is also used as a Cancel button to interrupt a process such as recording a CD to digital music or to exit certain screens in FireBall. This key also acts as the STOP loading pages button when browsing the OpenGlobe CE-Commerce opportunities.

The **PAUSE** key is used to pause music that is currently playing.

Transport Controls:
Previous Track/Rewind
Play
Next Track/Fast Forward
Record
Stop
Pause

iRADIO - selects Internet Radio as the current mode. The currently available Internet Radio stations will be displayed.

MUSIC - selects Music as the current mode. The contents of your music collection will be displayed.

NEXT - skips forward to the next song based on the current play mode.

RANDOM - allows one key access to start playing your music randomly.

ADD TO FAVORITES - adds the currently highlighted song to the special Playlist called "favorites".

PLAY FAVORITES - allows one key access to play your favorite music. Plays the "Favorites" Playlist.

iRadio — Next
Music — Random

Add to Favorites
Play Favorites

Text Entry Via the FireBall Remote Control

The remote control can be used to enter text in all text fields. This text entry capability is provided to allow you to fill out short text fields – such as those that occur in the setup and edit screens. FireBall's IR keyboard should be used when extended typing is required.

Entering Numeric Entry Mode

In fields where FireBall expects only numeric characters to be entered (such as phone number fields), an indicator will appear on the screen that displays the letters "123" indicating that only numbers can be entered.

Typing Characters with the Remote

The remote control based text entry capability is similar to that provided on standard telephones and cell phones. Each numeric key has characters associated with it that can be accessed by pressing the key one or more times. You have .5 seconds after a key is pressed to enter a second character from the same key. If you press the same key within .5 seconds, the second character associated with that key replaces the initial character. If you do not press the same key within .5 seconds, the text cursor moves to the next location so that the same key can be pressed again to enter a second character.

Text entry is always in the Insert Mode rather than in Overtype mode.

The "2", "3", "4", "5", "6", and "8" keys each support three letters and one number and can be pressed from one to seven times to display upper case, lower case, and numeric characters. The "7" and "9" keys both support four letters and one number and can be pressed from one to nine times. The "1" and "0" keys support all of the special characters and will cycle through each character for every key press.

The text characters follow the same convention used by a standard telephone – except in the case of the "1" and "0" keys which contain additional characters that are useful for editing music information.

When entering characters at the beginning of a field or characters that follow a space, FireBall assumes that upper case characters are preferred. Therefore, characters are entered in the following cycle – uppercase, lowercase, and numeric. For example, the first key press enters an uppercase letter corresponding to the first letter associated with the key. Pressing the "2" key once displays an "A" in the text field, pressing the "2" key twice displays a "B", pressing it again will display a "C". The fourth key press displays a lower case "a", the fifth key press displays a lower case "b", and the sixth key press displays a lower case "c". Lastly, pressing the "2" key a seventh time displays the number "2".

When entering the second character in a text field or the second character following a space, FireBall assumes that lower case is preferred and the character entry cycles in the following pattern – lowercase, uppercase, and numeric.

The following text entry table describes the sequence of characters that appear when specific keys are pressed on the remote:

Numeric Key	Alpha-numeric Mode 1st character or 1st character after a space	Alpha-numeric Mode 2nd character or 2nd character after a space
1	1. / , ? ' : ; & ~!	1. / , ? ' : ; & ~!
2	ABCabc2	abcABC2
3	DEFdef3	defDEF3
4	GHIghi4	ghiGHI4
5	JKLjkl5	jklJKL5
6	MNOmno6	mnoMNO6
7	PQRSpqrs7	pqrsPQRS7
8	TUVtuv8	tuvTUV8
9	WXYZwxyz9	wxyzWXYZ9
0	0@ _ - * # [] ( )+=	0@ _ - * # [] ( )+=

Navigating within a text entry box using the remote:
- Backspace over text – Backspace key
- Delete text – Play key (clears all text input in the current Edit Field)
- Insert a space in text – Space key
- Cursor left within a text field – Left arrow key
- Cursor right within a text field – Right arrow key

To exit a text entry box:
- Press the Enter or Select key to accept the text and move the text cursor to the to the next available text field or to highlight the next available non-text field.
- Press the up or down cursor key to move the highlight to the next available field.
- Press the Record key (if in an Option screen) to save the text and exit the screen.

What Is The Setup Process?

To optimize FireBall so that you can enjoy all of its capabilities, you will need to go through a "setup" procedure.

You will encounter two types of setup procedures within FireBall.

❶　　The first type of Setup is Quick Start, and occurs automatically the first time FireBall is used. It is a required procedure which presents a series of screens and menus that enable FireBall to connect to Escient's OpenGlobe Services via the Internet and to configure your FireBall for your location.

❷　　The second type of Setup is one you can initiate at any time by pressing the Setup button on your remote or wireless keyboard . This particular setup allows you to customize user preferences, audio and video settings, changer management, communication port settings, security and more.

The Quick Start process takes an average of 5 minutes to complete. However, the time it takes to process your music library (get CD cover art, titles, artist info) depends upon the number of CD changers and the number of CDs in your collection. For example, four-hundred (400) CDs could take a couple of hours to complete.

You do not have to be present during Autobuild. FireBall can be left unattended during this process.

Running Quick Start

❶ It will be easier if you use the wireless keyboard for this procedure. After you are done with Quick Start, you can use any of the input devices: remote or keyboard. (You cannot use the touch panel during the Quick Start procedure.)

❷ If you have an Internet Service Provider (ISP), gather the following information:
- Access or Dialup Number
- Screen Name or Login Name
- Login Password
- Name of ISP

FireBall has a simple interface menu so that you can easily select and configure your connection on an existing account. Most other ISPs are supported if they use standard PPP type connections. If you do not know if your ISP supports this standard (Point to Point Protocol), simply call the provider and ask. **If you do not have an Internet Service Provider (ISP), please sign up for one before proceeding to step 3.**

❸ Press **Power** on the wireless keyboard or on the FireBall front panel. If you are using the remote, press the **FB** source button first, then press the **Power** key.

You can use the remote to get through the Quick Start procedure, but it will be easier using the wireless keyboard since you may have to enter text and numeric information on some of the menus and screens.

Free Internet Service providers (ISPs) do not use standard, consistent methods of Internet connectivity and do not open their networks to outside users. Escient has set up an out of the box offer with AOL. You can sign up for AOL Internet access by following the instructions on the QuickStart screens.

Guided Tour Through Quick Start

Quick Start is a setup procedure that occurs automatically the first time the Power button is pressed. It is a required procedure which presents a series of screens and menus that enable FireBall to access the Internet and register with Escient.

Each screen contains a button bar at the bottom for accessing the previous or **back** page and the **next** page.

The UP, DOWN, LEFT, RIGHT ARROW keys on the keyboard or remote are used to highlight the items while the SELECT key is used to accept the item. The default button on the Quick Start screens is the **next** button, which means you can always press the SELECT key to accept the current page and move to the next screen.

The following pages guide you through the entire Quick Start process.

Point your keyboard or remote toward the FireBall unit, and not your display device.

"**Button**" refers to a graphic item on the display screen.

"**Key**" refers to the pushdown mechanisms on your remote or keyboard.

Quick Start - Welcome

Quick Start - Navigation

❶

The Quick Start process begins with a welcome screen that describes all of the great FireBall features. Press the SELECT key to advance to the next page.

❷

Using the remote control, follow the onscreen instructions to advance through each section of Quick Start. The arrow keys (Up, Down, Left, and Right) on the remote are used to move the onscreen highlight. Press the select button on the remote to activate the highlighted onscreen button.

Quick Start - Internet Access

Quick Start - New ISP Account

❸
Do you currently have an ISP
(Internet Service Provider)? The
yes button is highlighted by default.

FireBall needs to be connected to
the Internet in order for it to register
,lookup disc information, listen
to Internet Radio, and to use the
Enhanced Entertainment Services.

If you do not have an ISP account,
you will be presented with
instructions on how to sign up for
one.

Pressing SELECT will advance
you to the AOL Dial-up Login Info
screen.

Quick Start - Internet Access Connection Type (FireBall)

Quick Start - Internet Access Connection Type (FireBall E)

❹

Which type of Internet connection do you have? The choices are: AOL Dial-up, CompuServe Dial-up, Other Dial-up, Ethernet (cable modem, DSL, LAN) or HomePNA. AOL Dial-up is highlighted by default.

If you are using Ethernet or HomePNA, go to step 8.

❹ (FireBall E)
Which type of Internet connection do you have? The choices are: AOL Dial-up, CompuServe Dial-up, Other Dial-up, or Ethernet (cable modem, DSL, LAN). AOL Dial-up is highlighted by default.

If you are using Ethernet, go to step 8.

Quick Start - Internet Access - Free Dialup ISP Information

❺

The FireBall is compatible with any dialup ISP which supports standard PPP connections, however FireBall does not support the "free" ISPs. If you are trying to use one of these "free" ISPs you will need to obtain a new account with another ISP such as AOL, MSN, or Earthlink.

Quick Start - AOL Dialup User

❻

If you selected AOL Dialup as your ISP, you enter your AOL screen name, password, and access numbers here. If you use AOL on your PC, you can get your access numbers from your AOL PC software. You can also find your local AOL access number on the web at: http://access.web.aol.com/ or AOL keyword "Access".

Quick Start - CompuServe Dialup User

If you selected CompuServe as your ISP, you enter your CompuServe user name, password, and access numbers here. If you use CompuServe on your PC, you can get your access numbers from your CompuServe PC software. You can also find your local CompuServe access number on the web at: http://www.compuserve.com/content/phone/access.htm or AOL keyword "Access".

Quick Start - Other Dialup User (standard PPP)

If you selected Other Dialup as your ISP, you enter your user name, password, and dialup numbers here. Contact your ISP if you need help with this information.

A Name Server IP address is not required but may be required by your ISP. Check with your ISP to make sure.

Quick Start - Dialing Preferences

The Dialing Preferences screen allows you to set the dialing preferences for your location.

Call Waiting is usually disabled by using the "*70" prefix, but other methods such as "70#" or "1170" may be required. Check with your local phone company if you are having problems.

The exact phone number which will be dialed is also displayed.

Quick Start - IP Addressing

Quick Start - Static IP Info

❽
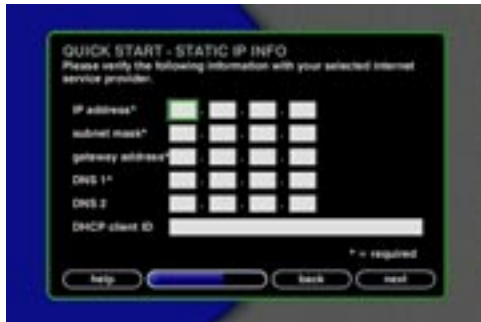
For HPNA (FireBall only) and Ethernet connections, you will be asked what type of IP Addressing to use. In most cases this can be left as DYNAMIC.

If your network requires static IP addresses, select **static** and go to the next screen.

❾

If you are on an HPNA (FireBall only) or Ethernet network and you selected Static IP addressing, you will see the Static IP Info screen.

Enter the IP address, subnet mask, gateway address, domain name servers, and DHCP client ID information here. This information should be obtained from your network administrator or ISP.

Quick Start - Broadband Access

❿

For HPNA (FireBall only) and Ethernet connections, you will be asked if you use AOL or Road Runner for your broadband access.

If you are not an AOL or Road Runner customer, select Other. For AOL and Road Runner users, this information is NOT used for network access. It is only used to receive updates and gain access to any future AOL broadband services.

Quick Start - AOL or Road Runner Broadband Users

AOL and Roadrunner broadband users will be prompted to enter their AOL screen name and password or Roadrunner email address and password in order to automatically receive updates and gain access to any future broadband services.

Quick Start - HPNA/Ethernet Network Test

❶❶

For HPNA (FireBall only) and Ethernet connections, you can run the HPNA/Ethernet Connection Test.

This test checks each part of the Internet connection, informs you if there are any problems, and offers suggestions on how to correct them.

Quick Start - Zip Code Information

❶❷

All users are required to enter the Zip code (or Canadian Postal Code) for the location of their FireBall. The Zip Code is only used to set the time of day for automatic updates.

Select the "**read privacy policy**" button if you are interested in reviewing Escient's Privacy Policy. The Privacy Policy is also available from the SETUP menu.

Quick Start - Privacy Policy

Select the **more...** button to page down through the Privacy Policy. When you are finished, select the **return** button to return to the Zip Code screen.

Quick Start - Registration

Once the Zip Code is entered, Quick Start will connect to the Escient server using your Internet connection and register your FireBall. When the registration process is complete, you will see this screen.

Press the SELECT button on your remote to continue.

Run the Autobuild Process

FireBall manages CD libraries on external changers through an initial identification process Escient calls "Autobuild". During this process, FireBall contacts the Gracenote CDDB database to gather data about each of the CDs in your collection. This information includes Artist, Songs/Titles, and Cover Art.

To initiate an Autobuild, load the changer(s) with discs and close the door or, if the discs are already loaded, open and close the changer(s) doors. FireBall will immediately initiate a connection to the CDDB database on the Internet to get the data for your collection. Processing time will vary based on changer brand and models and the number of CDs in your music collection.

When complete, the guide screen will be updated with a CD group on the filter bar and all music available from the attached CD changer(s) will be identified by a CD icon to the left of the title/artist/track that it recognizes. Some CDs may not be recognized, and in that instance, FireBall attaches a generic "style/genre of music" cover and generic text.

We recommend that you do not interrupt the Autobuild process. Please allow enough time (see note below) for the process to complete.

The length of time it takes to complete the Autobuild process is dependent upon changer brand and model. In addition, please allow approximately 30-60 seconds per disc for the actual information processing. This means that a fully loaded 200-disc changer could potentially take 200 minutes.

Inserting and Removing Discs

After the initial Autobuild, what happens when you insert and remove discs from your changer? If FireBall detects that a changer door has been closed, the Quick Lookup screen is shown, and FireBall will begin to check each previously empty slot in the changer to see if any new discs were added. It also checks each previously occupied slot in the changer to see if any discs were removed.

Do not remove and insert discs in the same slot in the same step because Autobuild will not know that this slot changed.

Do not remove and insert discs in the same slot in the same step.

Escient Pipeline software allows you to add scanned or downloaded covers not recognized by FireBall.

If it finds new CDs, FireBall will initiate a connection to the CDDB database on the Internet to get data for your new CD.

If you remove discs and put others back in the same slot, you will have to manually initiate a <u>detailed lookup</u> such as **lookup range** or **lookup all** in the **changer management** section in SETUP. The GET MUSIC INFO screen will report the status of the lookup progress until it is complete, or you press STOP to cancel the operation.

Adding or Removing Changers

If a changer has been attached to FireBall, removed, and then re-attached, FireBall will assume that the disc collection has not changed. If you have made disc changes to FireBall, you should manually go to the **changer management** section in SETUP and check all discs to insure that all discs are recognized.

If a changer has been attached to FireBall, but then is completely removed, the titles for CDs in that changer and the playlists still appear in the Guide. However, unlike MP3 music which is located on the FireBall, the CDs and playlists from this particular changer are not available for play and are indicated by a questin mark '?' in the Title's icon..

If supported changers are not found, you will be asked if you want to disconnnect the changer permanantly, try again to locate it, or ignore the fact that it was not found.

Networked FireBalls: Music from attached changers is available for play on the FireBall which is physically connected to the changer.

Unlike MP3 music, CDs are not available for play to or from remote FireBalls or MP-100 Players attached to a home network.

WARNING!

Selecting "Disconnect" will permanently remove all CDs in that changer from your Music Guide. In order to re-connect the changer and show the CDs in the Music Guide, you must perform a full Autobuild on the changer if it is reconnected at a later time.

Power the changer On.

Insert discs. If discs are already inserted, simply open and close the changer door.

This will start the Autobuild process which is the downloading of information regarding your CD collection.

Register with Escient

Please take a moment to register FireBall.
- Press SETUP on your remote or wireless keyboard.
- SELECT **user information**.
- SELECT **user registration**.
- Follow instructions on screen.

Using the Front Panel, Remote, Keyboard, or Touch Screen

You can navigate through the FireBall menus and screens using any of the following devices: FireBall front panel, remote, wireless keyboard, touch screen.

In order to use your ETP-1000 Touch Panel, it must be calibrated with the calibration utility. See Chapter 9 for this procedure.

Each device has its pros and cons and each individual user will undoubtedly have their favorite access method. It is possible that you may end up using different devices depending upon what you want to do.

The basics of navigation are:

- Use the UP, DOWN, LEFT, and RIGHT ARROW keys to maneuver around the screen to highlight items of interest.

- Use the SELECT key to accept the highlighted item.

In order to use your ETP-1000 Touch Panel, it must be calibrated with the calibration utility. See Chapter 9 for this procedure.

For a complete overview of each access device, please refer to the Appendices.

Overview Of User Interface

The FireBall user interface is very simple and uses three common screens throughout. The screens operate consistently, regardless of the source. The screens you will see are Guide Screen, Player screen, and Options Screen.

Guide Screen Overview

Guides contain listings of content that can be selected for listening and assist you in finding and organizing your library.

Sample Guide Screen

ENTERTAINMENT SERVICES

VISUAL CUES:
Cover Art

INFO TEXT:
About
Selection

VIEW:
Artist / Title / Song

FILTER & TOUCH SCREEN BAR: Groups & Touch Controls

CONTENT: Icons

CD OR MP3: Title / Tracks / iRadio Stations
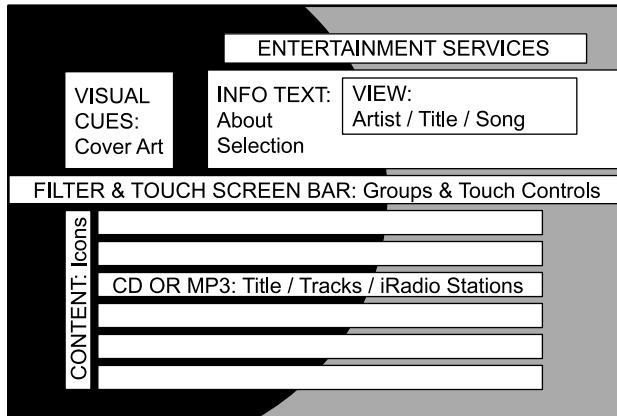
Content Icons

In front of each title in the Guide Screen is a content icon that describes the format and the type of media in the music library. Following are descriptions of all the icons.

A CD or MP3 disc located in FireBall's internal disc drive

A CD which is located in an external changer

A CD which is located in an external changer which has been disconnected

A collection of MP3 tracks

A collection of MP3 tracks on a disconnected remote FireBall

An Internet Radio station.

A collection of songs known as a "playlist"

An uncompressed audio file also known as a WAV file

Sample Guide Screen

Player Screen

The Player screen is used to listen to audio content and display information about the currently playing content.

- The Music Player allows you to listen to a music selection and view the tracks that are being played, the name of the artist, the title, track times, and a large image of the album's cover art.

- The Radio Player allows you to listen to a selected iRadio station and view the station information and song information (if available).

Options Screen

The OPTIONS menu for Music and iRadio are similarly configured but the wording is different. Both of the menus allow you to organize and edit your music content.

Title/Track Area Details

- Each item in the list represents a collection of music known as a "Title" in the Music Guide or a "Station" in the Internet Radio Guide. Icons are displayed on the left side of each row to indicate the type of Title or Station.

- Each Guide always has one highlighted Title or Station.

- A CD inserted into the front panel drive is always listed in the top location of the ALL group in the Music Guide.

- The currently highlighted title's information is displayed in the Info Text Area.

- Pressing the SELECT key when a Title is highlighted will expand the Title and reveal the tracks contained in that Title. Pressing the SELECT key again will collapse the Title and hide the track names.

- Titles are sorted alphabetically according to the current guide view: Cover, Songs, Titles, and Artists. The guide view can be changed by toggling the MENU/VIEW button on the remote or keyboard.

- Tracks are sorted by the track location on the original CD. On Playlists, tracks are sorted in the order they were originally selected when creating the Playlist.

- Pressing the PLAY key when a Title is highlighted will play the Title. Pressing the PLAY key when a Track is highlighted will play the track.

- Playing an External Audio Device from the Music Guide is accomplished by selecting the name of the external device from the "Ext Input" Group.

Screen Saver

All screens will display a screen saver after 10 minutes of inactivity (no user inputs received from the remote, keyboard, or front panel). You can change the timing of this option through the SETUP menu, PREFERENCES option. (10 minutes is the default.)

Filter Bar Details

If more than 5 groups exist, the Filter Bar displays an arrow pointing right next to the right most group. This indicates that additional groups are available. When you cursor past the right most group to access a new group, all of the displayed groups will slide to the left. An arrow pointing left will be displayed in the left most group.

There are 4 System groups created automatically: ALL which always exists and includes all titles, CD which includes only physical CD titles (but which only appears if a CD changer is connected), MP3 which includes only MP3 titles (but which appears only if there is a CD group), and PLAYLISTS which contains custom playlists created by you.

There are 15 groups generated automatically based on genre. These groups are Blues, Classical, Country, Dance, Easy, Family, Jazz, Latin, New Age, Other, Pop, R&B, Rock, and Sound Tracks. Each group will only appear if there is at least 1 CD of that genre in the database.

Chapter 4 - Playing Music

Accessing Music Mode
Music Player Screen Overview
Navigating the Music Player Screen
Selecting and Listening to a Music Title
Sorting Music by Artist, Title, or Song
One Key Access to Favorite Music
One Key Access to Random Music

4

Accessing Music Mode

There are a number of ways of entering Music mode:

1. Open the CD tray located on the front of the FireBall and insert an MP3 or audio CD. FireBall will switch from its current mode and start to play. It will then connect to the internet to identify the disc and load the information into the music library, display the track list, title artist, and cover art in the Music Player View.

2. Select the MUSIC key. FireBall displays the Music Guide view so that you can navigate and select an item of choice.

3. Select the RANDOM key on the remote. FireBall displays the Player Screen and starts playing the currently selected group in Random Play Mode.

4. Once you have created a "Favorites" playlist, you can select the PLAY FAVORITES key to automatically start playing the music on this list.

While in Music mode, you can listen to the following music:

1. Listen to CD in front panel CD tray.
2. Listen to any CD in attached CD Changers.
3. Listen to any digital music, including MP3 tracks, that have been recorded onto FireBall's internal hard disc.

If you insert an MP3 CD into the CD tray, only the first 250 songs are identified.

Music Player Screen Overview

When you select a music title for listening, the screen displayed is the Music Player screen.
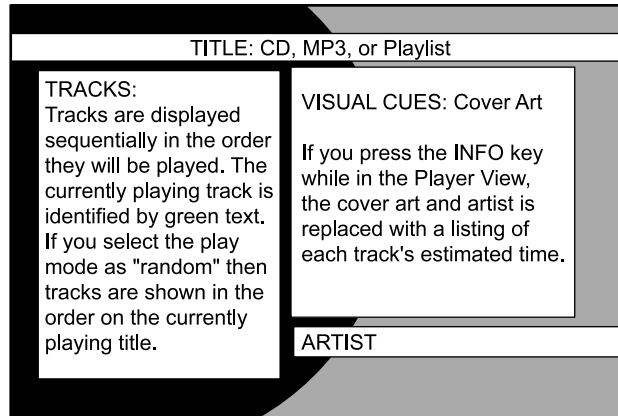
When a Playlist is playing, the cover and artist name from the currently playing track will be displayed and the Playlist name will appear in place of the usual title.

```
TITLE: CD, MP3, or Playlist

TRACKS:                          VISUAL CUES: Cover Art
Tracks are displayed
sequentially in the order        If you press the INFO key
they will be played. The         while in the Player View,
currently playing track is       the cover art and artist is
identified by green text.        replaced with a listing of
If you select the play           each track's estimated time.
mode as "random" then
tracks are shown in the
order on the currently           ARTIST
playing title.
```

Navigating the Music Player Screen

- ARROW - Use the UP and DOWN keys to move the highlight from one track to another. The RIGHT and LEFT keys are not used on the Music Player Screen.

- SELECT - Pressing this key when a track is highlighted stops playing the selected track and starts playing the highlighted track. You can also play the track by pressing the PLAY key.

- PAGE UP, PAGE DOWN - These keys are used to scroll the music player track list one page at a time. Each page can display up to 12 tracks at a time. An arrow will appear at the bottom of the track list when there are more than 12 tracks in the current Title.

- NUMERIC KEYPAD - You can enter a track number using the keypad and then pressing the ENTER key.

- INFO - When you press this key, detailed track information is displayed including track times, current play mode, and the running time for the currently playing track.

- RECORD - Pressing this key initiates a "recording" session. See the next Chapter "Recording Music" for details.

- PLAY, PAUSE, & STOP - These keys are used to play, pause, or stop music. An onscreen status is provided each time the key is pressed.

- TRACK NEXT & BACK - These keys are used to skip forward and backward to the next/previous track. An onscreen status is provided each time the key is pressed.

Selecting and Listening to a Music Title

❶   Press the MUSIC key and the MUSIC GUIDE screen appears.

❷   Use the LEFT and RIGHT ARROW keys to highlight the GROUP of your choice.

❸   Use the UP and DOWN ARROW keys to highlight the music title of your choice.

❹   Press the PLAY key to play the highlighted title. The title, tracks, and cover art are displayed in the Player screen and the music plays.

Viewing Music by Artist, Title, Cover or Song

❶   Press the MUSIC key if you are not in Music Mode.

❷   Press the GUIDE key, if you do not see the Music Guide. The MUSIC GUIDE screen appears.

❸   Press the MENU/VIEW key. The screen will toggle through each of the different Music Guide Views. You'll see your music collection sorted alphabetically and displayed by Artist Name, Title, Songs or by Cover Art.

One Key Access to Favorite Music

The PLAY FAVORITES key on the remote or keyboard allows you to immediately start playing the music in your "Favorites" playlist. No other key presses are required once you have added music to the list.

To add music to your "Favorites" playlist from the Music Player screen, simply press the ADD FAVORITES key on the keyboard or remote to quickly add the CURRENT highlighted track to the playlist. "Song will be added to Favorites" will appear across the bottom of the Player screen for 3 seconds.

To add music to your "Favorites" playlist from the Music Guide, simply highlight any Track name and press the ADD FAVORITES key on the keyboard or remote. "Song will be added to Favorites" and will appear in the Information area of the Guide screen.

One Key Access to Random Music

When you press the RANDOM key on the remote or keyboard, FireBall automatically starts playing the current group in Random Group mode.

Random

Add to Favorites
Play Favorites

Chapter 5 - Recording Music

5

Available Recording Modes
Types of Recording Discs Supported
Compression Rates Versus MP3 Audio Quality
Navigating the MUSIC-RECORD Screen
Rip to Internal HD Recording Option
Duplicate a Disc Recording Option
MP3 Mix CD Recording Option
Audio Mix CD Recording Option
External to Audio CD Recording Option
External to MP3 on HD Recording Option

Available Recording Modes

When you press the RECORD key on the remote or keyboard, the MUSIC RECORD OPTIONS dialog screen appears.

You will choose a record mode and follow the instructions on screen. You can cancel the record process at any time, at which time any temporary data is deleted from the internal hard disc. When the Record process is complete or if it is stopped before completion, you are returned to the Guide screen.

Types of Recording Discs Supported

FireBall is compliant with RIAA guidelines for music recording. The only blank media that can be used in FireBall for recording Red Book Audio CDs is either Music CD-R or Music CD-RW discs. Blank CD-R and CD-RW discs labeled "Data" cannot be used for creating audio CDs with FireBall. (Music CD-R and CR-RW discs are licensed for copying music because the manufacturer has paid a royalty to the RIAA.)

"Data" CD-R and CD-RW discs can be used to create MP3 Mix CDs.

Compression Rates Versus MP3 Audio Quality

When you record a CD to FireBall and it is compressed into an MP3 file, a certain amount of the original data is removed and lost forever during the compression process. Although the sound is not exactly the same, the quality is usually very close to the original.

There are instances, however, in which you may notice degradation that you want to correct. You may be able to improve the quality of the audio by using higher bit rates, which can be set through the SETUP menu, **preferences**, **music recording preferences**. The higher the bit rate, the higher the quality of the audio. Higher quality audio requires more storage space on your FireBall. The result is that you will be able to store fewer songs using a higher bit rate than at a lower bit rate.

FireBall's default bit rate is set at 192kbps and will yield good results. Bit rates such as 320kbps will yield even better results. Setting your bit rate to "uncompressed" will copy the raw CD audio from a CD to your FireBall without any compression. This produces an exact copy of the original audio CD inside your FireBall. Recording uncompressed will take up alot of space on your FireBall. Although this feature is available on all FireBalls, it is recommended for only the high capacity FireBall E-120 model because of it's large internal hard drive storage space.

The higher the bit rate, the higher the quality of the audio.

This higher quality comes at a cost....higher quality audio will use more space on the hard drive than lower quality audio.

Uncompressed recording requires more storage space on the hard drive.

FireBall has 6 recording modes:

rip to internal hd - When this mode is selected, you can copy CD Audio tracks from the internal CD drive or external changer to the Internal Hard Disc as MP3 or uncompressed audio files ("rip" is the term that describes recording from a CD to the internal hard drive).

duplicate disc - When this mode is selected, you can create an exact copy of an MP3 or Audio Disc from the internal drive or an external changer.

audio mix cd - When this mode is selected, you can create a compilation or mix disc of your favorite audio tracks that can be played on most consumer CD players.

mp3 mix cd - When this mode is selected, you can create a compilation or mix disc of your favorite MP3 tracks that can be played on most PCs and devices that support MP3s.

ext to audio cd - When this mode is selected, you can record from external audio sources (radio, tape, LPs, receiver record outputs) to an Audio CD that can be played on most consumer CD players.

ext to hd - When this mode is selected, you can record external audio sources (radio, tape, LPs, receiver record outputs) to the internal hard disc using the current music recording preferences.

FireBall is compliant with legal guidelines for music recording. The only blank media that can be used in FireBall for recording Red Book Audio CDs is either Audio CD-R or Audio CD-RW discs. Blank CD-R and CD-RW discs labeled "Data"cannot be used for creating Red Book Audio CDs with FireBall.

Navigating the MUSIC-RECORD Screen

When you select one of the "record" options on the MUSIC RECORD OPTIONS screen, the MUSIC-RECORD Select Guide appears.

The navigation of this screen is the same as the Music Guide with the following exceptions:

- SKIP BACKWARD - Not used.

- STOP – cancels the recording process.

- RECORD – continues the record process.

- GUIDE, OPTION, & OPENGLOBE have no function.

Rip to Internal HD Recording Option

When this mode is selected, you can copy CD Audio tracks to the Internal Hard Disc using the current bit rate selected in the SETUP menu, **preferences**, **music recording preferences**.

❶ Press the MUSIC key.

❷ Press the RECORD key. The MUSIC RECORD OPTIONS screen appears.

❸ Use the ARROW keys to highlight the recording option **rip to internal hd**.

❹ Press the SELECT key. The MUSIC-RECORD Select Guide appears. CD Audio and MP3 discs in the front panel CD drive and the external changer appear on the screen. The last highlighted Title will automatically be selected.

❺ Use the ARROW keys to highlight specific tracks you want to record and use the SELECT key to select or deselect each item.

❻ Press the INFO key to select or deselect all tracks on a highlighted title.

❼ Press the RECORD key to begin the rip process.

If there is a disc in the front panel CD drive, it is expanded and all of its tracks are selected by default. This allows you to press RECORD again to quickly rip all tracks from an inserted disc.

To rip all the CDs in a changer - use the ARROW and SELECT keys to highlight 300 or less songs, then press the RECORD key to begin the rip process.

Pressing the INFO key will select/deselect all tracks on the highlighted title.

You will need to keep track of the songs already ripped and then start another session by repeating the entire procedure. Since recording is done in real time, each session will take a while. Example: 30 CDs will take approximately 30 hours to rip.)

Duplicate a Disc Recording Option

When this mode is selected, you can create an exact copy of an MP3 or CD disc located in an external changer or the internal CD drive.

❶   Press the MUSIC key on your remote or keyboard.

❷   Press the RECORD key. The MUSIC RECORD OPTIONS screen appears.

❸   Use the ARROW keys to highlight the recording option **duplicate disc**.

❹   Press the SELECT key. The MUSIC-RECORD Select Guide appears. CD Audio and MP3 discs in the front panel CD drive and the external changers appear on the screen.

❺   Use the ARROW keys to highlight a title and use the SELECT key to accept the item. You can select only 1 title for duplication, so if you select another title the currently selected title is unselected.

❻   Press the RECORD key to begin the process. The selected disc will be read into the FireBall.

❼   Once the disc has been read and ejected, you will be asked to insert a blank disc.

❽   After you insert a blank disc, FireBall will write the new disc. You are notified when the process is completed - and the new disc is ejected.

If you insert an MP3 CD into the CD drive, only the first 250 songs are identified.

FireBall is compliant with legal guidelines for music recording. The only blank media that can be used in FireBall for recording Red Book Audio CDs is either "Audio CD-R" or "Audio CD-RW" discs. "Data CD-R" and "Data CD-RW" media cannot be used for creating Red Book Audio CDs with FireBall.

MP3 Mix CD Recording Option

When this mode is selected, you can create a compilation or mix disc of your favorite MP3 tracks that can be played on most PCs and devices that support MP3s.

❶   Press the MUSIC key.

❷   Press the RECORD key. The MUSIC RECORD OPTIONS screen appears.

❸   Use the ARROW keys to highlight the recording option **mp3 mix cd**.

❹   Press the SELECT key. The MUSIC-RECORD Select Guide appears. CD Audio and MP3 discs in the front panel CD drive, the external changers, and the internal hard drive appear on the screen.

❺   Use the ARROW keys to highlight a title and use the SELECT key to select one or more tracks for your mix disc.

❻   Press the INFO key to select or deselect all tracks on a highlighted title.

❼   Press the RECORD key to begin the process. You will be asked to insert a blank disc.

❽   After you insert a blank disc, FireBall will write the new disc. You are notified when the process is completed - and the new disc is ejected.

Tracks selected from an external changer are played and recorded in real-time then converted to MP3 format before being recorded to the CD. This process of converting formats will cause the record time to increase.

Audio Mix CD Recording Option

When this mode is selected, you can create a compilation or mix disc of your favorite CD audio tracks that can be played on most consumer CD players.

❶   Press the MUSIC key on your remote or keyboard.

❷   Press the RECORD key. The MUSIC RECORD OPTIONS screen appears.

❸   Use the ARROW keys to highlight the recording option **audio mix CD** and press the SELECT key. The MUSIC-RECORD Select Guide appears.

❹   Use the ARROW keys to highlight one or more tracks and use the SELECT key to select tracks for the Mix.

❺   Press the INFO key to select or deselect all tracks on a highlighted title.

❻   Press the RECORD again key to begin the recording process.

❼   Once the selected tracks are read into the FireBall, you will be asked if you want to add more tracks. If you do want to add more tracks, select **add more** and repeat step. If you are done adding tracks to your Mix disc, select the **done** button. Any disc in the internal drive will be ejected, and you will be asked to insert a blank disc.

❽   After you insert a blank disc, FireBall will write the new mix disc. You are notified when the process is completed - and the new disc is ejected.

You will have to select the tracks for inclusion on an Audio Mix CD in the exact order you want them to appear.

The **add more** feature is useful because it allows you to eject any CD-audio disc currently in the internal drive (by using the EJECT key on the front panel) and insert another source disc from which additional tracks can be chosen.

FireBall will write the Artist name and the track names and times to the new Audio CD using the CD-TEXT format. Most CD Players that are CD-TEXT compatible will be able display this information.

External to Audio CD Recording Option

When this mode is selected, you can record external audio sources (radio, tape, LPs, receiver record outputs) to an Audio CD that can be played on most consumer CD players. Be sure that your particular device's audio outputs are properly connected to the analog audio input on the back of your FireBall.

❶   Press the MUSIC key on your remote or keyboard.

❷   Press the RECORD key. The MUSIC RECORD OPTIONS screen appears.

❸   Use the ARROW keys to highlight the recording option **ext to audio cd**.

❹   Press the SELECT key. The EXTERNAL RECORD OPTION screen appears. You can accept the default settings and press RECORD again to begin the recording immediately, or edit the settings first.

The default settings are:

                Artist: UnknownArtist
                Title: UnknownTitle - <current date/time>
                Year: <current_year>
                Track: Track 1
                Record time: 30 minutes (maximum of 80 minutes)
                Input: Analog

You can only record external audio from the analog audio inputs because the digital inputs are reserved for any CD changers.

Each external recording is saved as a single track. You can not split the resulting track into multiple tracks.

❺ Once you have edited the settings, press the RECORD key to continue the process.

❻ If there is a disc in the front panel CD drive it is ejected, and you are asked to insert a blank disc. Once a valid destination disc is inserted, the selected music is copied to the destination disc. You are notified when the process is completed.

FireBall is compliant with legal guidelines for music recording. The only blank media that can be used in FireBall for recording Red Book Audio CDs is either "Audio CD-R" or "Audio CD-RW" discs. "Data CD-R" and "Data CD-RW" media cannot be used for creating Red Book Audio CDs with FireBall.

Each external recording is saved as a single track. You can not split the resulting track into multiple tracks.

External to MP3 on HD Recording Option

When this mode is selected, you can record external audio sources (radio, tape, LPs, receiver record outputs) as MP3 files on the internal hard disc. Be sure that this particular device's audio outputs are properly connected to the analog audio input on the back of your FireBall.

❶   Press the MUSIC key on your remote or keyboard.

❷   Press the RECORD key. The MUSIC RECORD OPTIONS screen appears.

❸   Use the ARROW keys to highlight the recording option **ext to mp3 on hd**.

❹   Press the SELECT key. The EXTERNAL RECORD OPTION screen appears. You can accept the default settings and press RECORD again to begin the recording immediately, or edit the settings first.

            The default settings are:
                    Artist: UnknownArtist
                    Title: UnknownTitle - <current date/time>
                    Year: <current_year>
                    Track: Track 1
                    Record time: 30 minutes (maximum of 80 minutes)
                    Input: Analog

FireBall is compliant with legal guidelines for music recording. The only blank media that can be used in FireBall for recording Red Book Audio CDs is either "Audio CD-R" or "Audio CD-RW" discs. "Data CD-R" and "Data CD-RW" media cannot be used for creating Red Book Audio CDs with FireBall.

❺ Once you have edited the settings, press the RECORD key to continue the process. This begins the record to the internal hard disc as a single MP3 track.

When recording multiple tracks from the same album, ensure that the Artist and Title fields are all the same (case sensitive) and sequentially recorded. This information must be consistent in order to group the tracks into the same title.

You can use the Escient Pipeline PC software to modify this information later.

Chapter 6 - Managing Music

To Further Organize Your Music
To Create a New Music Playlist
To Edit a Music Playlist
To Delete a Music Playlist
To Change How Music is Played
To Delete Digital Music on FireBall
To Edit Tracks
To Edit Disc Information
To Search For Cover Art
To Select Cover Art
To Access "More..." Music Options
To Create a New Music Group
To Edit a Music Group
To Delete a Music Group
To Erase CD-RW
To Transfer Music to a Portable MP3 Player
To Get Music Info

To Further Organize Your Music

You can easily manage your music through FireBall's MUSIC OPTIONS feature. This set of screens allows you to create and manage Playlists (lists of songs) and Groups, look up and edit music information, and transfer music to portable players. In addition, MUSIC OPTIONS also allows you to adjust play modes.

There are two screens of MUSIC OPTIONS. The first screen appears when you press the OPTION key while in MUSIC mode. The second screen becomes available after selecting the "**more...**" button in the MUSIC OPTIONS panel.
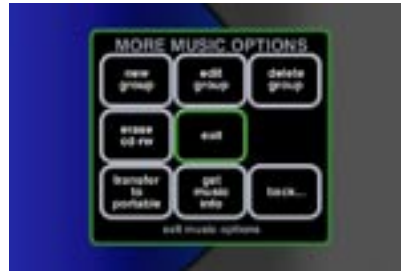
"**Button**" refers to a graphic item on the display screen.
"**Key**" refers to the pushdown mechanisms on your remote or keyboard.

Use the ARROW keys to highlight the desired option and use the SELECT key to activate the desired option.

To Create a New Music Playlist

A Playlist is a collection of specific songs from your music collection.

❶   Press the MUSIC key.

❷   Press the OPTION key. The OPTION panel appears.

❸   SELECT the **new playlist** button. A screen displays so that you can enter the name for the new playlist.

❹   After you have entered the new name, press SELECT to continue.

❺   When the playlist name is saved, the screen transitions to the EDIT PLAYLIST screen where you will select the tracks you want to add to the Playlist from all the music FireBall knows. Use the ARROW keys to navigate through the music and highlight your choice. Use the SELECT key to toggle between including (shows check mark) or not including a track in the current Playlist.

❻   Press the RECORD key to save the new playlist and exit the OPTION mode.

If no songs are added to a new Playlist, it is not saved. Likewise, if all songs are removed from a playlist, it is deleted.

Up to 200 songs may be added to a playlist.

There is no limitation on the number of playlists you can create.

If you create a playlist that contains both MP3 and CD titles and you remove the CD Changer from FireBall, CD titles in the Playlist will be skipped during playback. (MP3 songs are stored on FireBall and are not affected.)

To Edit a Music Playlist

❶ Press the MUSIC key to show the Music Guide.

❷ Use the ARROW keys to highlight the music playlist you want to edit.

❸ Press the OPTION key.

❹ SELECT the **edit playlist** button. The EDIT PLAYLIST screen is displayed and allows you to edit the name of the playlist. You do not have to edit the name of the playlist in order to modify its members.

❺ Press the SELECT key to continue so that you can modify the tracks in the playlist.

❻ Cursor UP and DOWN to highlight the titles. A check mark indicates when a track is to be included in the playlist. Use the SELECT key to toggle between including or not including a track.

❼ Press the RECORD key to save this playlist and exit the OPTION mode.

Use the INFO key when a Title is highlighted in the Edit Playlist screen to add/remove all tracks to/from the playlist.

To Delete a Music Playlist

❶ Press the MUSIC key to show the Music Guide.

❷ Use the ARROW keys to highlight the music playlist you want to delete.

❸ Press the OPTION key.

❹ At the OPTION panel, SELECT the **delete playlist** button to remove the currently active playlist. The DELETE PLAYLIST screen displays and shows the contents of the playlist.

❺ Press the RECORD key to delete the playlist and return to the previous Guide or Player view. A dialog message displays asking for confirmation before the playlist is deleted.
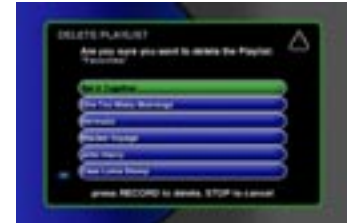
To Change How Music is Played

❶   Press the MUSIC key and then press the OPTION key.

❷   At the OPTION panel, SELECT the **play mode** option button.

❸   Select the option of your choice from the available settings:

- **normal** - Start with a selected track and play the entire Title or Playlist to the end.

- **repeat track** - Keep playing the current track over and over again.

- **repeat title** - Keep playing the current music Title (CD, MP3, or Playlist) from start to finish and then start over.

- **repeat group** - Keep playing all the music Titles in the current group of music from start to finish and then start over.

- **random title** - Randomly select and play songs from the current Title (CD, MP3, or Playlist)

- **random group** - Randomly select and play songs from the current group of music.

❹   Press the SELECT key to set the selected play mode and return to the previous screen.

Note: The MODE key on the remote will cycle through each of these modes.

To Delete Digital Music on FireBall

FireBall uses an internal hard drive to store your digitally recorded music. If you want to delete music from your FireBall, follow these instructions.

❶   Press the MUSIC key to show the Music Guide.

❷   Press the OPTION key.

❸   At the OPTIONS panel, SELECT the **delete music** option. The DELETE MUSIC screen displays an information panel that shows a storage meter indicating how much storage space has been used, the number of tracks that have been recorded, as well as how many more tracks and hours of music can still be recorded to FireBall.

❹   Press the SELECT key to advance to the Delete Music Select Guide.

❺   Cursor UP and DOWN to highlight the titles and SELECT to expand and collapse titles. Use the SELECT key on a highlighted track to toggle a check mark on and off. A check mark indicates when a track is to be deleted.

❻   Press the INFO key to select or deselect all tracks on a highlighted title.

❼   Press the RECORD key to delete the selected music tracks and exit the DELETE MUSIC screen.

The hours left and tracks left calculations are based on the current bit rate setting which is also shown on the information screen.

Use the INFO key when a Title is highlighted in the Delete Music Select Guide to select/deselect all tracks.

To Edit Tracks

This option allows you to modify the track name for the currently highlighted title.

❶   Press the MUSIC key to show the Music Guide.

❷   Use the ARROW keys to highlight the title which contains the tracks you want to edit.

❸   Press the OPTION key.

❹   At the OPTION panel, SELECT the **edit tracks** button. The EDIT TRACKS screen displays.

❺   Use the UP and DOWN ARROW keys to highlight the desired track.

❻   Enter a new track title/name and press the ENTER key to save the current track name and advance to the next track. You can press the PLAY key to clear the current track name.

❼   Press the RECORD key to accept the changes.

To Edit Disc Information

This option allows you to edit the music collection's information such as artist name, title, label name, and year of release. Or, you can have FireBall look up the latest information from Escient's OpenGlobe service.

Edit Disc is also the method to identify the current disc and download it's cover art.

❶ Press the MUSIC key on your remote or keyboard.

❷ Press the GUIDE key. The MUSIC GUIDE screen appears.

❸ Use the ARROW keys to highlight the disc you want to edit.

❹ Press the OPTION key.

❺ At the OPTION panel, SELECT the **edit disc** button. The EDIT DISC INFO screen displays.

❻ Use the ARROW keys to move to the text field of your choice and edit the field.

❼ Or, SELECT the **lookup this disc** button to replace the current disc information. To save the new data, press the RECORD key.

To Search For Cover Art

This option allows you to view the current cover art and select an option to look up the cover.

❶ Press the MUSIC key to show the Music Guide.

❷ Use the ARROW keys to highlight the disc you want to obtain the cover for.

❸ Press the OPTION key.

❹ At the OPTION panel, SELECT the **edit disc** button. The EDIT DISC INFO screen displays.

❺ Use the ARROW keys to move to the **search for cover** button and press SELECT.

❻ A "search for cover" confirmation dialog box appears. You may change the Artist Name and Title for the search. The change is not saved with the disc.

❼ Press SEARCH to continue. If a new cover is not found, then the current cover remains. If a new cover is found, the resulting cover selection is displayed in the screen..

❽ Press the RECORD key to save the new cover with the title.

The Search for Cover dialog allows you to search for covers using an alternate Artist Name and/or Title without changing the titles's actual information.

Try removing any dates, disc numbers, and common words from the Search for Cover title field.

To Select Cover Art

This option allows you to select a cover for a music title.

❶   Press the MUSIC key to show the Music Guide.

❷   Press the GUIDE key. The MUSIC GUIDE screen appears.

❸   Use the ARROW keys to highlight the disc you want to select a cover for.

❹   Press the OPTION key.

❺   At the OPTION panel, SELECT the **edit disc** button. The EDIT DISC INFO screen displays.

❻   Use the ARROW keys to move to the **select cover** button and press SELECT. The SELECT COVER ART screen is shown and allows you to choose a new cover.

❼   Use the UP and DOWN ARROW keys to highlight an image and use the SELECT key to save the selected cover.

Only covers which are already loaded on your FireBall will be available.

To Access "More..." Music Options

There are two screens of MUSIC OPTIONS. The first screen appears when you press the MUSIC key followed by the OPTION key.

The second screen becomes available after SELECTING the "**more...**" button in the original MUSIC OPTIONS screen.
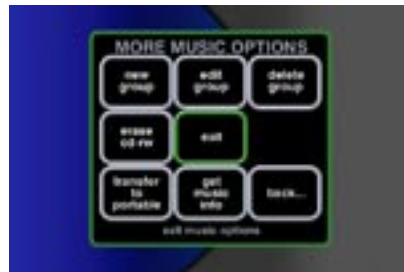
"**Button**" refers to a graphic item on the display screen.

"**Key**" refers to the pushdown mechanisms on your remote or keyboard.

Use the ARROW keys to highlight the desired option and use the SELECT key to activate the desired option.

To Create a New Music Group

A group is a collection of content that classifies your music titles to make them easier to find. Genre groups such as Jazz, and Country are automatically generated depending upon the current music in your collection. The groups you create can be named whatever you want (i.e., My Favorites, Party Mix, Classics, etc...).

❶ Press the MUSIC key, and then press the OPTION key. Use the ARROW keys to highlight the **more...** button and press the SELECT key.

❷ At the MORE MUSIC OPTIONS panel, SELECT the **new group** button. A screen displays so that you can enter the name for the new group.

❸ After you have entered the new name, press SELECT to continue.

❹ When the group name is saved, the screen transitions to the EDIT MUSIC GROUP screen where you will select titles to be included in the new group. Cursor UP and DOWN to highlight the titles. A check mark indicates when a title is to be included in the group. Use the SELECT key to toggle between including or not including a title.

❺ Press the RECORD key to save the new group and exit the OPTION mode.

Music can reside in more than one group. For example, the same music could exist in the groups: All, Rock, Favorites, and Mine.

To Edit a Music Group

❶ Press the MUSIC key to show the Music Guide.

❷ Use the RIGHT and LEFT ARROW keys to highlight the group you want to edit.

❸ Press the OPTION key. Use the ARROW keys to highlight the **more...** button and press the SELECT key.

❹ At the MORE MUSIC OPTIONS panel, SELECT the **edit group** button. The EDIT GROUP screen displays which allows you to edit the name of the group. You do not have to edit the name of the group in order to modify the members of the group.

❺ Press the SELECT key to continue so that you can modify the titles in the group when the EDIT MUSIC GROUP screen displays.

❻ Cursor UP and DOWN to highlight the titles. A check mark indicates when a title is to be included in the group. Use the SELECT key to toggle between including or not including a title.

❼ Press the RECORD key to save this group and return to the Guide.

To Delete a Music Group

❶ Press the MUSIC key to show the Music Guide.

❷ Use the RIGHT and LEFT ARROW keys to highlight the group you want to delete.

❸ Press the OPTION key. Use the ARROW keys to highlight the **more...** button and press the SELECT key.

❹ At the MORE MUSIC OPTIONS panel, SELECT the **delete group** button to remove the currently active group. The DELETE GROUP screen displays and shows the contents of the group.

❺ Press the RECORD key to delete the group. A dialog message displays asking for confirmation before the group is deleted.
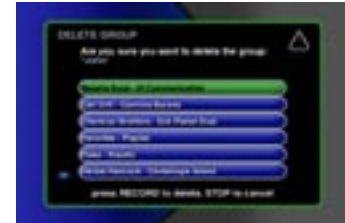
To Erase CD-RW

❶   Place the CD-RW you want to erase into FireBall's front panel CD drive.

❷   Press the OPTION key. Use the ARROW keys to highlight the **more...** button and press the SELECT key.

❸   At the MORE MUSIC OPTIONS panel, SELECT the **erase cd-rw** button to erase the CD in the FireBall front panel CD drive.

❹   Press the RECORD key to erase the CD-RW. A confirmation message will be displayed before the disc is erased. Select the **erase** button to erase the selected disc.

Note: An error message will be displayed if there is no disc in the drive or if there is a blank disc in the drive.

To Transfer Music to a Portable MP3 Player

This option manages the transfer of CD tracks or compressed audio tracks (MP3) from your FireBall to a portable music player. You can also remove contents of the Portable with this process.

❶　　Press the MUSIC key to show the Music Guide.

❷　　Press the OPTION key. Use the ARROW keys to highlight the **more...** button and press the SELECT key.

❸　　At the MORE MUSIC OPTIONS panel, SELECT the **transfer to portable** button to display the Transfer to Portable Music Guide.

❹　　Use the UP and DOWN ARROW keys to highlight tracks in your music guide and press the SELECT key to mark it for transfer to the Portable. Tracks selected for transfer will have a green "transfer" arrow on the right most edge of the track. Press the SELECT key again to remove the transfer indicator. Use the SELECT key to display or hide the tracks of the highlighted Title.

This option is started automatically when a supported USB portable is attached.

FireBall supports the following Portable Players:

- COMPAQ PA1
- COMPAQ PA2
- RIO 600

Other models of portable players may be added in future software upgrades. When they are, this information will be added to the Escient website at www.escient.com under products/ FireBall.

❺   The contents of the Portable Player are accessible through the Portable Player Title at the top of the list. To remove an existing track from the Portable Player, highlight the track and press the SELECT key. An "X" on the right side of the track name indicates that the track will be removed.

❻   Press the RECORD key to start the transfer process. All tracks marked for removal will be deleted from the Portable and all selected tracks will be transferred. If you have selected more tracks than will fit on your Portable Player, you will be instructed to remove tracks (un-select them) before you can continue with the transfer.

❼   The Transfer to Portable status screen will appear displaying the estimated transfer time and the time remaining until the transfer is complete.

No other functions can be accessed until the transfer process is completed.

The "space available" is calculated as a single block for one or more storage modules in a portable device. Portable devices with multiple memory modules will appear as a contiguous storage area.

WARNING:
Memory fragmentation on some portable players may cause problems when transferring music. If you are experiencing problems, try reducing the number of tracks to transfer and try again.

To Get Music Info

This option is only used to identify unknown titles or titles that never completed their original lookup process. Normally, new titles are identified automatically when they are inserted in the front panel disc or any external changer. When this option is chosen, an information screen displays the number of changers attached, number of discs in your collection, free music slots, and unknown discs. If you press SELECT to continue the Get Music Information operation, FireBall will automatically connect to the Internet, lookup each unknown disc, and then disconnect. You may terminate the connection manually at any time by pressing the STOP key.

❶   Press the MUSIC key.

❷   Press the OPTION key. Use the ARROW keys to highlight the **more...** button and press the SELECT key.

❸   At the MORE MUSIC OPTIONS panel, SELECT the **get music info** button. An information screen displays.

❹   If you press the SELECT key to continue, a connection dialog message displays showing the progress of the update from Escient's OpenGlobe server. As each disc is recognized, the tracking screen displays the current cover art and title. When the process is complete, the Music Guide screen is displayed.

Get Music Info will only identify titles which were recorded from the internal CD drive or from an external changer. It will not identify tracks transfered from MP3 CDs or from the Pipeline software.

Chapter 7 - Using iRadio

7

Entering iRadio Mode
Reviewing the iRadio Guide
Navigating Among iRadio Stations
Playing an iRadio Station
Changing iRadio Options
To Create a New iRadio Group
To Edit an iRadio Group
To Delete an iRadio Group
To Tune Stations
To Create a New iRadio Station
To Edit an iRadio Station
To Delete an iRadio Station
Supported iRadio Bitrates

Entering iRadio Mode

❶   Select the iRADIO key. FireBall displays the Radio Guide view so that you can
navigate and select an Internet Radio station to play.

Guide Screen Overview

Guides contain listings of content that can be selected for listening and assist you in

finding and organizing your Internet radio stations.

ENTERTAINMENT SERVICES

iRadio
STATION
LOGO

iRadio
STATION
INFO

GROUP FILTER BAR ▶

ICONS: iRadio

iRadio STATIONS: Each line displays a single
iRadio station. Choices are always sorted by
the station name.
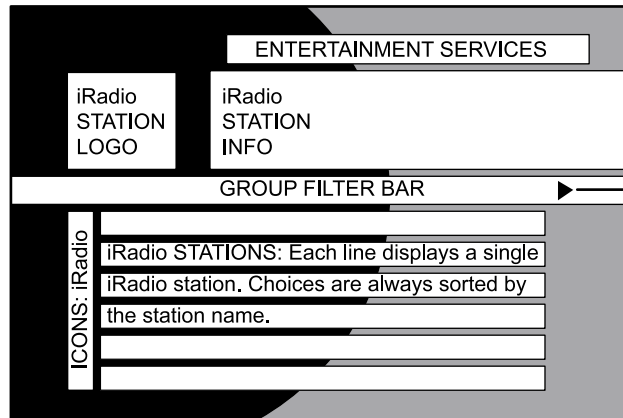
The Group Filter Bar displays
up to 5 iRadio Groups
including **ALL.** If more than 5
groups exist an arrow appears
after the last item

Navigating Among iRadio Stations

Use the UP and DOWN ARROW keys to move from one station to another. Use the RIGHT and LEFT ARROW keys to move between the groups in the Filter bar.

To change the stations in the guide one page at a time, use the PAGE UP and PAGE DOWN keys.

Playing an iRadio Station

To play a specific station, press SELECT (or PLAY) when that station is highlighted. The iRadio Player screen is displayed.

In the Player screen, to advance to the next or previous station without returning to the Radio Guide, use the PAGE UP and PAGE DOWN keys. The STOP key will stop the Internet Radio stream from playing. Pause will NOT pause the stream.

Sirius Internet Radio Stations
Sirius Internet Radio Stations are only available to Broadband Internet users. If you are using Dial-Up Internet access, the Sirius Internet Radio Stations will NOT appear in your Radio Guide.

To maximize the enjoyment of this feature, a Broadband connection is recommended to avoid the "buffering and popping" experience associated with a slower connection. However, even a Broadband connection has factors (such as the number of users on the system or server capability) that may adversely affect your listening experience.

Changing iRadio Options

Press the OPTION key while in iRadio mode for the iRadio OPTIONS menu to appear.

This screen allows you to organize and access content based on stations and groups.

iRadio options are organized much like music options. In other words, after you select a specific option, sometimes a second or third screen is provided to refine your request.

The term GROUPS on the iRadio option screen refers to a collection of stations that are organized together so that you can easily find your favorite stations. Some groups are created automatically while others are created by you. The ALL groups contains all of the Internet Radio stations. Genre based groups are automatically setup for new stations as they are updated by Escient.

To Create a New iRadio Group

A group is a collection of content that classifies your stations to make them easier to find. Genre groups such as Jazz, and Country are automatically generated depending upon the current iRadio stations in your collection. The groups you create can be named whatever you want (i.e., My Favorites, Stuff, Talk).

❶   Press the iRADIO key on your remote or keyboard, and then press the OPTION key. Use the ARROW keys to highlight the **new group** button on the displayed panel and press the SELECT key.

❷   A screen displays so that you can enter the name for the new group.

❸   After you have entered the new name, press SELECT to continue.

❹   When the group name is saved, the screen transitions to the EDIT RADIO GROUP screen where you will select stations to be included in the new group. Cursor UP and DOWN to highlight the stations. A check mark indicates when a station is to be included in the group. Use the SELECT key to toggle between including or not including a station.

❺   Press the RECORD key to save the new group and exit the OPTION mode.

To Edit an iRadio Group

❶ Press the iRADIO key to show the Radio Guide.

❷ Use the RIGHT and LEFT ARROW keys to highlight the group you want to edit.

❸ Press the OPTION key. Use the ARROW keys to highlight the **edit group** button on the displayed panel and press the SELECT key.

❹ The EDIT GROUP screen displays which allows you to edit the name of the group. You do not have to edit the name of the group in order to modify the members of the group.

❺ Press the SELECT key to continue so that you can modify the stations in the group when the EDIT RADIO GROUP screen displays.

❻ Cursor UP and DOWN to highlight the stations. A check mark indicates when a station is to be included in the group. Use the SELECT key to toggle between including or not including a station.

❼ Press the RECORD key to save this group and return to the Guide.

To Delete an iRadio Group

❶　Press the iRADIO key to show the Radio Guide.

❷　Use the RIGHT and LEFT ARROW keys to highlight the group you want to delete.

❸　Press the OPTION key. Use the ARROW keys to highlight the **delete group** button on the displayed panel and press the SELECT key.

❹　The DELETE GROUP screen displays and shows the stations in the selected group.

❺　A dialog message displays asking for confirmation before the group is deleted. Press the RECORD key to delete the group.
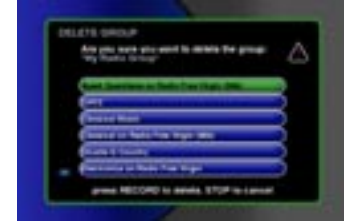
delete group does not remove any of the underlying stations which remain available in the "ALL" group.

To Tune Stations

Tune Stations is used to clear your current set of Internet Radio Stations and replace them with a new set of stations from the Escient server. Internet Radio stations come and go all the time. Escient keeps track of which ones are still available and makes it easy for your FireBall to have the latest working Internet Radio Stations.

❶   Press the iRADIO key to show the Radio Guide.

❷   Press the OPTION key. Use the ARROW keys to highlight the **tune stations** button on the displayed panel and press the SELECT key.

❸   A WARNING screen appears to warn that tuning the stations will replace all of the built-in Internet Radio stations. Select the OK button to continue.

❹   FireBall will now connect to the Escient server to download the latest Internet Radio stations. A dialog will display the current progress of the download.

❺   When Tune Stations is complete, the Radio Guide will be displayed showing the new set of Internet Radio stations.

WARNING
Tune Stations will replace all of the built-in stations with the latest stations from the Escient server.

To Create a New iRadio Station

An iRadio station is an Internet link or "URL" to a radio stream. Creating a new iRadio station means manually entering a link to a known Internet Radio Stream. FireBall can stream WMA V2, V7, and V8 formats, up to 192kbps.

❶   Press the iRADIO key on your remote or keyboard, and then press the OPTION key. Use the ARROW keys to highlight the **new station** button on the displayed panel and press the SELECT key.

❷   A screen displays so that you can enter the name, location, URL, speed, genre, and channels. (The cover art is selected based on the genre.) Enter the radio station stream's internet address into the URL field. For example: "http://www.streamaudio.com/stations/WXYZ.asf"

❸   After you have entered the new information, press RECORD to save the new station and return to the Radio Guide.

❹   To play the new station, highlight the station name in the Radio Guide, then press the PLAY key. If the URL is correct and the sever is up and running, you should hear the station playing in a few moments. If there is a problem with the stream, you will see the "Station Not Available" message.

If you are entering a URL for a new station, make sure it uses a WMA Internet radio stream.

New stations can be foud on Internet sites such as www.radio-locator.com

To Edit an iRadio Station

❶   Press the iRADIO key to show the Radio Guide.

❷   Use the ARROW keys to highlight the station you want to edit.

❸   Press the OPTION key. Use the ARROW keys to highlight the **edit station** button on the displayed panel and press the SELECT key.

❹   The EDIT INTERNET STATION screen displays which allows you to edit the information for the station.

❺   Press the RECORD key to save this station and return to the Guide.

To Delete an iRadio Station

❶   Press the iRADIO key to show the Radio Guide.

❷   Use the ARROW keys to highlight the station you want to delete.

❸   Press the OPTION key. Use the ARROW keys to highlight the **delete station** button on the displayed panel and press the SELECT key.

❹   The DELETE RADIO STATION screen displays and shows the station's name.

❺   Press the RECORD key to delete the station.

❻   A dialog message displays asking for confirmation before the station is deleted. Highlight the delete button and press the SELECT key to delete the station.

Supported iRadio Bitrates

FireBall supports the following iRadio bitrates and sampling frequencies:

WMA-Audio V2, V7 and V8		
Bitrate	Sampling Frequency	Stereo/ Mono
5Kbps	8KHz	Mono
6Kbps	8KHz	Mono
8Kbps	8KHz	Mono
	11.025KHz	Mono
10Kbps	11.025KHz	Mono
	16KHz	Mono
12Kbps	16KHz	Mono
	8KHz	Stereo
16Kbps		Mono
	16KHz	Stereo
	22.05KHz	Mono

	16KHz	Stereo
		Mono
	22.05KHz	Stereo
20Kbps	32KHz	Mono
	22.05KHz	Stereo
22Kbps	32KHz	Stereo
	22.05KHz	Stereo
	32KHz	Stereo
		Mono
32Kbps	44.1KHz	Stereo
36kbps	32KHz	Stereo
40Kbps	32KHz	Stereo
44kbps	32 Khz	Stereo
	32KHz	Stereo
		Mono
48Kbps	44.1KHz	Stereo

	32 Khz	Stereo
64Kbps	44.1KHz	Stereo
80Kbps	44.1KHz	Stereo
96Kbps	44.1KHz	Stereo
	44.1KHz	Stereo
128Kbps	48KHz	Stereo
	44.1KHz	Stereo
160Kbps	48KHz	Stereo
	44.1KHz	Stereo
192Kbps	48KHz	Stereo

Chapter 8 - Customizing FireBall

Two Ways to Customize FireBall
To Change User Information
To Change Internet Configuration Settings
To Change Preferences
To Access Changer Management Features
To Change Security Settings
To Access FireBall Utilities

8

Two Ways to Customize FireBall

There are two methods of customizing FireBall: through the OPTIONS menu or through the SETUP Menu. The OPTIONS menu is used to customize features which need frequent changing during the normal operation of the system, while the SETUP menu provides access to general user preferences.

Use the OPTIONS menu for:
- Organizing access to content - managing groups, managing play lists, editing music information, deleting music, looking up music information, and transferring or recording music to portable players.
- Adjusting player controls - play modes (random, repeat, etc.)

Use the SETUP Menu to change:
- user information
- internet configuration
- preferences
- audio, video, and com ports
- changer management
- security
- utilities

These menus will be covered in this chapter.

The OPTIONS menu is discussed in Chapter 6: Managing Music.
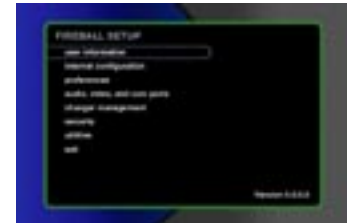
To Change User Information

❶   Press the SETUP key on the remote control or keyboard. The SETUP main menu displays.

❷   Select the menu item **user information**. The menu displays.

❸   Select the sub-menu item you want to modify and follow the instructions on the screen.

user registration - Allows you to input your name, address, phone number to identify you as the user.

time zone - Enter your ZIP code here. Setting your ZIP code allows the automatic update time to be properly configured for non-peak times.

user profile - If you want to receive information or services from OpenGlobe that caters to your particular age group or gender, you can fill in this menu.

additional product information - This item allows you to select whether or not you want to be informed regarding additional valuable services or support.
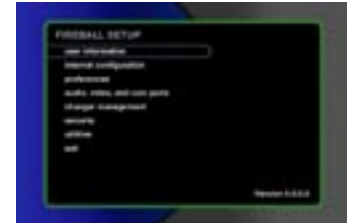
remote administration - Shows the User Name and Password used to access the OpenGlobe services website from your PC. You can use this website to edit your OpenGlobe account information from your personal computer.

privacy policy - Displays all of the legal disclaimers and warranty information for this product.

back - When you select this item, the screen goes back to the previous screen displayed.

❹ Exit SETUP by selecting the EXIT menu item located at the bottom of the main menu, or by pressing the SETUP key when on the main menu or any sub-menu.

To Change Internet Configuration Settings

❶   Press the SETUP key on the remote control or keyboard. The FireBall SETUP main menu displays.

❷   Select the menu item **internet configuration**. The menu displays.

❸   Select the sub-menu item you want to modify and follow the instructions on the screen.

network connections - Specifies the Primary and Secondary TCP/IP Settings. The Primary connection is used for all Internet and OpenGlobe enhanced services such as disc lookups, purchasing, internet radio, etc., and the Secondary connection is used for connecting the FireBall to other FireBalls, and to use the Pipeline PC software. The Secondary connection may be different from the Primary connection. Note: FireBall E will show "Ethernet TCP/IP Settings" only.

dial-up settings - This item is originally configured in Quick Start but you can manually change it here for dial-up access PPP accounts. The password appears as visible text when the field is empty AND you enter the password. Once you leave the password field, the password field changes to hidden text. Subsequent returns to this screen will show the password as hidden text. Specific dialing options for your location can also be set here such as Dial-up Numbers and Dialing Prefix.
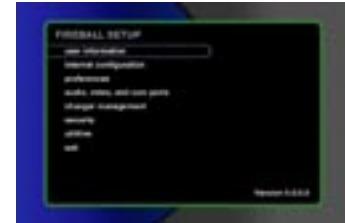
If you backspace at any point while in the password box, the entire password is erased.

primary tcp/ip settings (FireBall) - TCP/IP can be configured Dynamically or Manually.   Dial-up connections on FireBall only support dynamic IP configurations.

secondary tcp/ip settings (FireBall) - Secondary TCP/IP can be configured Dynamically or Manually. Use the NETWORK CONNECTIONS screen to enable a Secondary network connection". If your Primary and Secondary Network Connections are the same, changing the tcp/ip settings will effect both the Primary and Secondary network connections. The secondary settings are useful for accessing FireBall on an HPNA network (from your PC using the Escient Pipeline software) while your FireBall uses the dialup modem for it's Internet connection.

ethernet tcp/ip settings (FireBall E) - Ethernet TCP/IP can be configured Dynamically or Manually. Please consult with your network administrator or ISP to obtain the correct values for these settings.

FireBall name - If you have a network, this will be the name of the FireBall viewed from another FireBall or the Pipeline software.

❹ Exit SETUP by selecting the EXIT menu item located at the bottom of the main menu, or by pressing the SETUP key when on the main menu or any sub-menu.


Dial-up connections only support dynamic IP configurations.

To Change Preferences

❶ Press the SETUP key on the remote control or keyboard. The SETUP main menu displays.

❷ Select the menu item **preferences**. The menu displays.

❸ Select the sub-menu item you want to modify and follow the instructions on the screen.

music recording preferences - Specifies at what Bitrate you want to encode MP3 music. The default is 192k. Selections range from 128k, 160k, 192k, 320k or uncompressed.

screen saver preferences - Specifies the number of minutes of inactivity allowed before the screen saver is activated and the screen saver mode. The default setting is 10 minutes. Selections you may choose from are 5, 10, 15, 30, or 60 minutes.

automatic update preferences - Once a week FireBall automatically dials into the network server and downloads any software or database information that has been updated.

❹ Exit SETUP by selecting the EXIT menu item located at the bottom of the main menu, or by pressing the SETUP key when on the main menu or any sub-menu.

To Change Audio, Video, and Com Ports Settings

❶ Press the SETUP key on the remote control or keyboard. The SETUP main menu displays.

❷ Select the menu item **audio, video, and com ports**. The menu displays.

❸ Select the sub-menu item you want to modify and follow the instructions on the screen.

audio input selection - Specifies which digital audio inputs are used for your CD changers. Both optical and coaxial digital inputs are provided.

com port settings - During the Quick Start setup, changers and touchscreens attached to the communication ports were automatically detected. If you attach additional equipment use this screen to indicate which of the 3 com ports are used by an optional touch panel, external control system, or Elan system.

calibrate touch panel - Allows an attached ETP-1000 touch screen display device to be calibrated.

screen centering - Adjusts the horizontal placement of the FireBall screen so that the generated computer image is centered horizontally on your TV.
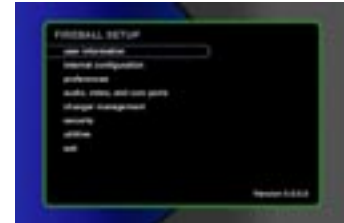
The LEFT, and RIGHT ARROW keys on the remote or keyboard are used to position the screen horizontaly.

brightness - Use the brightness controls of your TV for optimum viewing.

contrast - Use your display's contrast controls to help reduce video "blooming" while creating a clearer, more readable interface.

sharpness - Sets the sharpness or detail control of your TV so that onscreen text is as readable as possible.

color bars - Displays the SMPTE color bars. You may use this screen to test the display for color and tint accuracy.

❹ Exit SETUP by selecting the EXIT menu item located at the bottom of the main menu, or by pressing the SETUP key when on the main menu or any sub-menu.

To Access Changer Management Features

❶ Press the SETUP key on the remote control or keyboard. The SETUP main menu displays.

❷ Select the menu item **changer management**.

❸ Select the sub-menu item you want to modify and follow the instructions on the screen.

quick lookup - Checks each previously empty slot in the changer(s) to see if any new discs were added and then checks each previously occupied slot to see if any discs were removed. If new discs were added, they will be looked up and added to the Music Guide. If discs have been removed, these discs will no longer appear in the Music Guide.

lookup range - Prompts you to enter a range of disc from 1-400 and select one of the attached changers and then does a lookup on each within the range.

lookup all - Looks up every disc in each changer.

changer statistics - This item displays the statistics of the changer based media.

❹ Exit SETUP by selecting the EXIT menu item located at the bottom of the main menu, or by pressing the SETUP key when on the main menu or any sub-menu.

To cancel any of the "Lookup" items while in progress, press the STOP button.
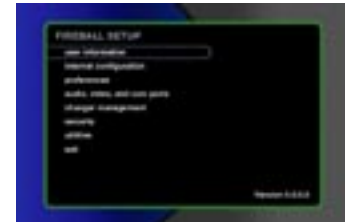
To Change Security Settings

❶   Press the SETUP key on the remote control or keyboard. The SETUP main
       menu displays.

❷   Select the menu item **security**. The menu displays.

❸   Select the sub-menu item you want to modify and follow the instructions on the
       screen.
       password protection - Allows you to password protect access to the Setup
       functions. Subsequent access to setup will be password protected.

       If you specify a password, you will be prompted upon power ON to enter the
       password. If the password entered matches the stored password, full access is
       granted until the next power OFF cycle. If the password does not match,
       you will be asked 2 more times to enter the correct password. If after the third
       try the password still does not match, you will not be able to use FireBall.
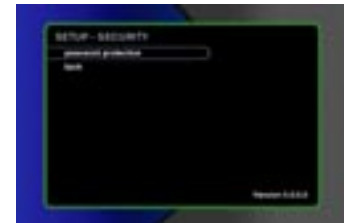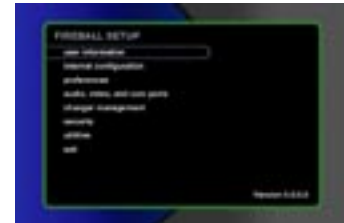
If you do not specify a system password, unrestricted access to the Setup Menus will be enabled. If security access is in place, a password will be required to access the Setup Menus the first time you press the SETUP key, after each Power On.

You are given the option of enabling password protection by entering a password and then verifying it. If you leave these fields blank, password protection will be disabled. Select a numeric only password and enter it twice for verification purposes. You can use the remote control or keyboard.

❹   Exit SETUP by selecting the EXIT menu item located at the bottom of the main menu, or by pressing the SETUP key when on the main menu or any sub-menu.

To Access FireBall Utilities

❶   Press the SETUP key on the remote control or keyboard. The SETUP main menu displays.

❷   Select the menu item **utilities**. The menu displays. (No other use of the system is permitted while one of the utility processes is running.)

❸   Select the menu item you want to access and follow the instructions on the screen.

     system reset - performs a soft reset of the FireBall. (This is the same as holding the front panel power button in for 4 seconds to reboot)

     configuration information - Displays the current FireBall internal settings including software versions, hardware versions, serial number, customer ID, and network settings.

     update software - This feature initiates a manual connection to Escient's OpenGlobe server to check for any software updates that are currently available. A confirmation dialog will ask if you really want to continue and look for an update because it may take some time. If an update is found the system will begin the software update process. A progress status bar appears so that you can estimate download time.
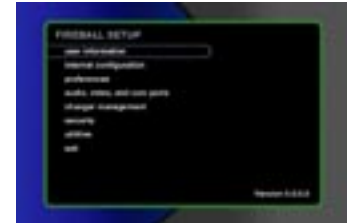
disconnect offline FireBalls (FireBall) - This option is used to remove the Music Titles which where loaded from other networked FireBall units. After you perform this option, the Music Guide will be free from any Music Titles which were loaded from the other FireBalls.

resynchronize all FireBalls (FireBall) - If you have other networked FireBalls, this option removes all of the remote FireBall's Music Titles from your Music Guide, then re-adds a new fresh set of Title from the remote FireBall(s).

IR remote control - allows you to control FireBall-MP using the FB, TB, or PP modes on the remote control. This is useful if you have more than one FireBall in the same room, so that all FireBalls do not respond to the same IR codes.

❹   Exit SETUP by selecting the EXIT menu item located at the bottom of the main menu, or by pressing the SETUP key when on the main menu or any sub-menu.

While using any of the SETUP UTILITIES, no other use of the system will be permitted.

Chapter 9 - Touch Screen Overview

9

Escient ETP Touch Screen Interaction
Elan VIA! Touch Panel Configuration

Escient ETP Touch Screen Interaction

This section describes how FireBall can be controled from the optional ETP Touch Screen. Contact your Escient Dealer for more information on the ETP Touch Screen.

When you initially setup FireBall, you will need to use the remote or wireless keyboard to navigate through the automatic setup program called Quick Start. **Once you have gone through this setup, you will be able to calibrate FireBall and use the Touch Screen. (See the side note on this page for calibration info.)**

There are a couple of differences between the guides and player screens that appear when using the touch screen device.

The Guide screen looks like this when no touch screen is in use.

The Player screen looks like this when no touch screen is in use.

If the touch screen does not seem to be centered or is otherwise not working, please use the remote or keyboard and press the SETUP key to go to the SETUP menu,choose **audio video and com ports**, **calibrate touch panel**.

Use the arrow keys to select the option "calibrate touch panel" and follow the instructions on the screen.

When an Escient touch screen is detected and powered on or the SETUP option for an external control system's XY coordinates is set, the touch screen buttons will appear on the Guide screen and the Player screen.

Toggles through the 3 available guide button bars:
1.   genres filter bar
2.   remote control button bar
3.   alpha-numeric bar

play
stop
record
all
page up
page down

The default bar is the genres filter bar. The genres automatically scroll to the left and right when the leftmost or rightmost genre is selected if there are more genres to view.

On the Guide screen a row of buttons appears on the right of the music content to let you play, stop, or record your music. Respectively, the stop, record, and all buttons will come in handy for canceling tasks, completing tasks, and toggling all tracks to be included or excluded. The page up and page down buttons allow you to scroll the guide one page at a time.

Pressing the toggle button again will change the view from the alpha-numeric bar to the remote control button bar.

remote control button bar

The remote control bar includes:
• Pause, Skip forward, and Skip backward transport controls
• Player - Show the Player screen
• Source - Toggle between Radio and Music source modes
• View - Changes the Music Guide View
• Options - Displays the Options Menu
• Favorites - Plays the Default Favorites Playlist
• Random - Plays the current Group in Random Play Mode

Pressing the toggle button once will change the view from the styles bar to the alpha-numeric bar. This bar lets you enter a letter or number to jump down to the music selection that begins with that letter. Pressing a letter will display the pressed letter in the on screen display area located between the two smoked glass windows at the top of the guide.

alpha-numeric bar

Escient Touch Panel

Selecting music to play or selecting the player button on the remote control button bar will present the Player screen. The Player screen appears with a toggle button when a touch screen is in use. The transport button bar is displayed when the toggle button is pressed again.

toggle button

transport button bar

Escient Touch Panel

The remote control button bar is displayed when the toggle button is pressed again.

remote control button bar

The Remote Control Button Bar includes:

- Guide - Show the Guide screen
- OpenGlobe - Go to the OpenGlobe Home screen
- Page Up/Down - scroll the Track list a page at a time
- Info - Display the Info screen
- Options - Display the Options menu screen
- Mode - Cycle through the Play Modes
- Add - Add the currently highlighted track to the Favorites Playlist
- Setup - Display the Setup menu

Escient Touch Panel

Elan VIA! Touch Panel Configuration

Using FireBall with the Elan VIA! system is quite easy. You can use Elan System Controllers or direct VIA! touch panel connections. FireBall uses a special screen overlay to provide VIA! touch panels with the required control points. You will need to have the latest VIA! Tools. Please contact Elan for more information.

Connect FireBall to the Elan VIA! Touch Screen
1) Route the IR output of the VIA panels to either the direct IR port of the FireBall (recommended) or use an emitter on the front of the FireBall (IR receiver is located on the right hand edge of the display window.
2) Connect the video out of FireBall to the VIA panel.
3) Using new version of VIA tools, select custom overlay template, and choose FireBall as a component in the VIA panel

Configuring FireBall for Elan VIA! control
1) Press SETUP->AUDIO VIDEO AND COM PORTS-> COM PORT SETTINGS.
2) Navigate to the IR FRAME button and press the SELECT key until the button is set to ENABLE
3) Navigate to the SAVE button and press the SELECT key.
4) Press SETUP to exit the setup menus. The Elan VIA! IR frame should now be visible on all video outs. Make sure the FireBall video is being routed to the VIA panels.

Music Guide Screen with Elan VIA! IR Frame Overlay

Appendix A - Cable Pin-Out Configurations

Pin Configurations for RS-232 Cables to CD Changers
Pin configurations for RS-232 Cables to Control Systems

A

Pin Configurations for RS-232 Cables to CD Changers

FireBall to Kenwood Changer

FireBall (DB9-Female)		Changer (DB9-Female)	
Pin	Function	Pin	Function
2	RD	3	TD
3	TD	2	RD
5	GND	5	GND

Standard RS-232 Nulled Cable.

FireBall to Pioneer Changer

FireBall (DB9-Female)		Changer (DB15-Male)	
Pin	Function	Pin	Function
5	GND	1	GND
2	RD	2	TD
3	TD	3	RD

RS-232 cable between FireBall and CD Player must be 25 feet or less.

With future releases of FireBall software, additional CD changers and controllers may be supported.

Please check the Escient website for the latest updates regarding RS-232 cable configurations.

Pin Configurations for RS-232 Cables to Control Systems

FireBall to AMX / Crestron / PHAST

FireBall (DB9-Female)		AMX/Crestron/PHAST (DB9-Female)	
Pin	Function	Pin	Function
2	RD	3	TD
3	TD	2	RD
5	GND	5	GND

RS-232 cable between FireBall and Control System must be 25 feet or less.

Appendix B - FireBall Technical Specs

Video
CD Functionality
Audio Specifications
Encoding Performance
Power Usage and Power Supply
3rd Party Certifications
Telephone Regulations
FCC Part 15, Subpart B

Video

·   NTSC
·   10 bit Video DACs
·   Frequency Response:
·   Composite: -2 dB @ 5MHz
·   S-Video: -2 dB @ 5MHz
·   SNR: 50 dB
·   Crosstalk: 50 dB
·   Input Impedance: 75Ohm
·   Output Impedance: 75Ohm

CD Drive Functionality

CD-ROM read speed: 40x
CD-R Write speed: 24x
CD-RW Write speed: 10x

Cabinet Specifications

Width: ~ 17 3/8"
Height: ~ 4 5/8" w/ feet;   ~ 4' w/o feet
Depth: ~ 11 7/8"; Installed 14 3/8"

Audio Specifications

·   Frequency Response: 2 – 20,000 Hz, ±1 dB
·   THD+N (playback) < -80 dB FS A (< 0.01%)
·   THD+N (record) < -90 dB FS A (<0.0032)
·   A_D-DSP-D-A Dynamic Range: > 96 dB FS A @ 1kHz
·   Channel Separation: >95 dB
·   Full Scale Line Output: >2 Vrms, 50 k ohms
·   Full Scale Line Input: >2.5Vrms
·   S/PDIF Output: 0.4Vpp to 0.6Vpp, <0.05Vdc (75ohm terminated)
·   Power Requirements: AC 90-132 VAC, 50-60 Hz
·   Power Consumption: < 60 watts

Encoding Specifications

Bit Rate	*40GB Hard Drive*	*120GB Hard Drive*
128k MP3	600 hours	1800 hours
160k MP3	500 hours	1600 hours
192k MP3	400 hours	1200 hours
320k MP3	250 hours	750 hours
Uncompressed WAV	60 hours	180 hours

Hours are approximate, as some drive space is needed for application and overhead.

Power Usage and Power Supply

· Open frame 60 Watt Supply
· Support for holding Power button for 4 seconds to force reset
· Full Power Off may be accomplished by removing the power cord from the wall power outlet
· Discrete Suspend (Sleep) and Resume (Wake up) commands
· Automatic Restore in the event of Power Loss
· UL/CUL recognized power supply

3rd Party Certifications

FCC: US Part 15, Class B
NTSC Video Output: NTSC RS-170A
cETL Listing
Part 68

Conforms to: UL STD 6500-2000
Certified to: CAN/CSA STD E60065-00

Telephone Regulations

(1) This equipment complies with Part 68 of the FCC Rules and it's requirements adopted by the ACTA. On the backpanel of this equipment is a label that contains, among other information, the FCC registration number and Ringer Equivalence Number (REN) for this equipment. If requested, provide this information to your telephone company.

(2) The registration jack USOC for the equipment is (RJ11C).

(3) An FCC compliant telephone cord and modular plug is provided with this equipment. This equipment is designed to be connected to the telephone network or premises wiring using a compatible modular jack that must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. See installation instructions for details.

(4) The REN is useful to determine the quantity of devices that may be connected to the telephone line. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of RENs of all devices should not exceed five (5). To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company. For products approved after July 23, 2002, the REN for this product is part of the product identifier that has the format US: AAAEQ##TXXXX. The digits represented by ## are the REN without a decimal point (e.g., 03 is a REN of 0.3). For earlier products, the REN is separately shown on the label.

(5) If your equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isn't practical, you will be notified as soon as possible. You will be advised of your right to file a complaint with the FCC if you believe it is necessary.

(6) Your telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of your equipment. If they do, you will be given advance notice so as to give you an opportunity to maintain uninterrupted service.

(7) If you experience trouble with this equipment, please contact (**Escient Technical Support @** 800.372.4368) for repair/warranty information. If your equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

(8) This equipment may not be used on public coin service provided by the telephone company. Connection to party lines is subject to state tariffs. (Contact your state public utility commission or corporation commission for information.)

(9) There are no customer serviceable repairs that can be made.

FCC Part 15, Subpart B

Class B
Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

•	Reorient or relocate the receiving antenna.
•	Increase the separation between the equipment and receiver.
•	Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
•	Consult the dealer or an experienced radio TV technician for help.
•	Shielded cables must be used with this unit to ensure compliance with the Class B FCC limits.

Appendix C - Minor Troubleshooting

Minor Troubleshooting Tips

C

Minor Troubleshooting Tips

Following are some easily resolved problems you may encounter during the installation of your FireBall unit. If you are experiencing difficulties that do not appear in the following list, please contact your dealer, check the Escient Website, or contact Escient tech support.

No Power
FireBall may be plugged into an unswitched AC power receptacle.

Power: but no video
Make sure FireBall is connected to the video source (television) before you power on FireBall. Make sure that the LED next to the Power button is not blinking. Following is the Power ON/Standby sequence.

After the FireBall unit is plugged in, the Standby LED located next to the power button will flash until the startup process is complete. **This may take a few minutes**.

When the Standby LED is solid ON, the FireBall is now in a standby or "sleep" mode.

Press the Power button (on the front panel or on the remote) once and the video output and front panel display will turn on. The unit is now ON.

To change from the ON mode back to the standby or "sleep" mode, press the Power button on the front panel or on the remote once.

Cannot connect to Internet using the dial-up modem
- Verify that an active phone line is connected to the line jack on the modem.
- Clear voice mail on your phone before attempting to connect, a solid dial tone is needed.
- Check to see if the phone system requires a prefix such as a #9. If it does, go to the DIAL-UP SETTINGS screen to add a prefix.
- Verify that your login name and password are correct.
- Passwords are CASE SENSITIVE. "password", "Password", and "PASSWORD" are all treated as different words.

Note: Earthlink accounts may require "ELN/" before the login name. For example: "ELN/johndoe@earthlink.net". Similarly MSN accounts may require "MSN/" before the login name. For example: "MSN/johndoe@msn.net".

Discs are identified, but do not have covers
- The internet server FireBall uses for cover searches may be temporarily down.
- The covers may not be available for your particular discs.
- Use the Edit Disc -> Search For Cover option to try and obtain cover art.

Remote LED does not blink when you press a key.
Replace the batteries with two (2) new AA alkaline batteries.

Remote LED blinks when you press a key, but home entertainment component does not respond
- Make sure the Remote is aimed at your home entertainment component and is not farther than 15 feet away.
- Check that the correct mode is selected (Press FB for FireBall.)
- Replace the batteries in the remote control with two (2) new AA alkaline batteries.

Remote does not control home entertainment components or commands are not working properly
Try all listed codes for the component brands being set up. Make sure they can be operated with an infrared remote control.

Appendix D - External Control Protocol

External Control Overview
Command / Response Overview
Unsolicited Status Events
Remote/Keyboard Commands
Database Commands
Status Commands
Control Commands

D

External Control Overview

This appendix describes the external control protocol commands and responses which allow an external control system to navigate the Escient products, get library information to build custom user interfaces, perform transport controls, and receive unsolicited feedback on system status.

This information is intended for experienced custom installers and software developers. Please refer to the Escient Dealer Support are on the Escient website for further information about external control of FireBall.

Commands and Responses Overview

The external control protocol is standard ASCII based. ESCX is the four letter preamble that is used for all commands. This preamble must be uppercase. The commands provided in this protocol allow an external control system to navigate the Escient products, get library information to build custom user interfaces, perform transport controls, and receive unsolicited feedback on system status.

All external control commands are made up of the preamble (ESCX), command group (01,02,10,20,50,70), sub command (specific task), specific data (# of data items, and a size of data packet then the actual data packet repeated for the # of data items), and a carriage return end marker.

External Control Command Structure

DESCRIPTION	PREAMBLE	COMMAND GROUP	SUB COMMAND	# DATA ITEMS	DATA ITEM #1 SIZE	DATA #1	DATA ITEM #2 SIZE	DATA #2	END MARKER
Bytes	4	2	2	3	4	5	4	3	1
Example	ESCX	01	08	002	0005	Hello	0003	Bye	Carriage Return

The external control commands are broken down into the following Command Groups:

01 – Command Responses
02 – Unsolicited Events
10 – Remote Button / Keyboard Commands
20 – Database Commands
50 – Status Commands
70 – Control Commands

All commands will cause one of the following response numbers to be issued. Some commands, such as database commands will also send back additional responses that contain more detailed information.

Command Responses

COMMAND GROUP	RESPONSE NUMBER	RESPONSE DESCRIPTION
01	01	OK
01	02	Bad Command Structure
01	03	Empty Library or Bad Range
01	04	Wrong Number of Command Arguments
01	05	Invalid Subcommand
01	06	Invalid Command
01	07	Not Available During Standby (deprecated)
01	08	Requested data not available
01	09	External control command not yet implemented (future)
01	10	Not Available at This Time

Response Format: ESCX01**xx**, where **xx** = Command response

Response 07 has been deprecated due to the new auto-on function. Whenever a valid command is received (with two exceptions), the system will automatically enter the "on" mode, if it is in standby. A client may still handle response 07, but it is no longer sent from the host for any reason.

Response 10 will be sent when a normally valid command is sent to the host, but it cannot be processed due to the system's mode. For example, a database play will not be processed while the system is in setup or options mode, autobuilding a changer, etc. Note that a keypress command will never return this response, as even audio transport keys (play, stop) have alternate functions in various modes.

Unsolicited status events can be sent to report the state changes of the Escient products. There are two currently defined message levels: 5 - track changes, and 10 - all (including 1-second playing time updates). Clients are registered at level 5 by default. Clients may change their message level using the ESCX7002 command. See the control commands section for instructions on how to resister and unregister for unsolicited status event levels.

Unsolicited Status Events

COMMAND GROUP	EVENT NUMBER	EVENT DESCRIPTION
02	01	Power status changed. When the system has booted into an off state you will receive a "RDY" status indicating it is ready to be powered on and from then on an "OFF" or an "ON " status.

02		*Event Format*: ESCX02010010003**xxx**,
		 Where **xxx** = a 3 character string
		   "RDY" = when power is first applied and it boots into
		        the off state (standby mode) – ready for power on.
		   "ON " = if power on turned on (GUI appears)
		   "OFF" = if power is off (standby mode) (Video out off)

02	02	Play Mode changed (normal, random, etc) [future implementation]
02		*Event Format*: ESCX02**02**, Where **02** = means the database has changed
02	03	Guide View changed

02		*Event Format*: ESCX02030010002**xx**
		 Where **xx** = the new guide view
		   01 = Guide changed to Artist view
		     CD titles are displayed sorted by artist name
		   02 = Guide changed to Titles view
		     CD titles are displayed sorted by CD title
		   03 = Guide changed to Song view
		     Song titles are displayed sorted by song title
		   04 = Guide changed to Cover view
		     Covers are displayed sorted by artist then by title

02	04	Playing Artist/Title/Song has changed

02		*Event Format*: ESCX02040060002**aa**0003**bbbccccdddeeeefffggggghhhiiiijjj**
		  aa = the play state
		    01 = Play, 02 = Stop, 03 = Pause
		    Radio only:
		    04 = Locating Station, 05 = Buffering data,
		    06 = Station Not Found
		  bbb = current track number (0 if Radio Mode)
		  cccc = length of artist name
		  ddd = artist name
		  eeee = length of title name
		  fff = title name (station name if Radio Mode [future])
		  gggg = length of track name
		  hhh = track name
		  jjj = current track time (0 if Radio Mode)
		The current track, artist name, title name, track name, and current track time are only returned for the play event. The stop and pause events just signify that the state has changed.

02	05	Guide Mode changed (Playlist edit mode, Record mode, Delete mode, etc) [future implementation]
02	06	Screen Mode changed (Guide, Player, Options, Setup, etc) [future implementation]
02	07	Database has changed. The external control system should re-read the library information. [future implementation]
02	08	GUI to Movie. User switched to the Full screen movie. [future implementation]
02	09	Movie to GUI. User switched back to the FireBall GUI from a movie. [future implementation]

The Remote Button / Keyboard commands are used when the video output of the FireBall system is displayed on a TV or large screen projector and it is desired to directly select the FireBall control functions through an external control system.

The up, down, left, right, and select functions can be used to navigate objects on the screen and select them. The active FireBall control func-

tion is highlighted and the selection cursor is moved over it.

Various other commands are used to mimic the operation of the remote control. Note that the command response will be "OK" as long as the key code is a valid one, even though the system may ignore the key if the system is in a mode where the key would not normally be processed.

Remote Button / Keyboard Commands

COMMAND GROUP	SUB COMMAND NUMBER	COMMAND DESCRIPTION
10	01	Left
10	02	Up
10	03	Right
10	04	Down
10	05	Select
10	06	Move To X and Y Coordinates and Select
10		The upper left point on the screen is (0,0) and the resolution of the screen is 720 by 480 pixels.
10		
10	07	Power Toggle
10	08	Power On
10	09	Power Off
10		
10	10	"0"
10	11	"1"
10	12	"2"
10	13	"3"
10	14	"4"
10	15	"5"
10	16	"6"
10	17	"7"
10	18	"8"
10	19	"9"
10	20	"~"
10	21	""
10	22	"/"
10	23	""
10	24	"?"
10	25	"@"
10	26	"-"

10	27	" "
10	28	"*"
10	29	"#"
10	30	Ch/Page +
10	31	Ch/Page -
10	32	Mode Increment – Only works in Player
10	33	Mode Play – Normal – Only works in Player
10	34	Mode Play – Repeat Track – Only works in Player
10	35	Mode Play – Repeat Title – Only works in Player
10	36	Mode Play – Repeat Group – Only works in Player
10	37	Mode Play – Random Title – Only works in Player
10	38	Mode Play – Random Group – Only works in Player
10	39	Setup
10	40	Option
10	41	Guide (toggles between Guide and Player) **
10	42	Guide Explicit (always goes to Guide) **
10	43	Player Explicit (always goes to Player) **
10	44	OpenGlobe
10	45	Info
10	46	Menu (DVD Menu and Guide View Increment)
10	47	Guide View – Covers
10	48	Guide View – Artist
10	49	Guide View – Title
10	50	Guide View - Song
10		
10	51	Play a numbered playlist (argument has playlist number)
10	52-53	Not used
10	54	Play
10	55	Stop
10	56	Pause
10	57	Previous Track
10	58	Next Track
10	59	Record
10		
10	60	Movies
10	61	Music
10	62	iRadio
10	63	Title
10	64	Angle
10	65	Resume
10	66	Next
10	67	Add Favorites
10	68	Play Favorites

10	69	Random
10	70	" "
10	71	BACKSPACE
10	74	"A"
10	75	"B"
10	76	"C"
10	77	"D"
10	78	"E"
10	79	"F"
10	80	"G"
10	81	"H"
10	82	"I"
10	83	"J"
10	84	"K"
10	85	"L"
10	86	"M"
10	87	"N"
10	88	"O"
10	89	"P"
10	90	"Q"
10	91	"R"
10	92	"S"
10	93	"T"
10	94	"U"
10	95	"V"
10	96	"W"
10	97	"X"
10	98	"Y"
10	99	"Z"

** This command does not function if the Options screen, OpenGlobe CE-Commerce screen, or Playlist Edit screens are displayed.

Command Format: ESCX10**xx**

    01 – ESCX10**01**
    02 – ESCX10**02**
    03 – ESCX10**03**
    04 – ESCX10**04**
    05 – ESCX10**05**

06 – ESCX10**06**0020003**aaa**0003**bbb**
aaa = X coordinate
bbb = Y coordinate

10 – ESCX10**10**

20 – ESCX10**20**
21 – ESCX10**21**
22 – ESCX10**22**
etc…

51 – ESCX10**51**0010001**x**
x = Playlist number (1 – 6)

All the Database commands are available regardless of the power state, except for Command 05, Play which will return an error response if attempted during standby. The groups, styles, and custom genres are grouped into system groups and user groups. The system groups have system groupings such as the All group, MP3 group, and Playlists groups. The user groups contain the genres for your music and your custom genres that have been created. The All radio station group and the NetRadio group are contained in the radio system groups while all other radio stations are in the system group. Titles are returned listed in alphabetical order by title regardless of the state of the user interface.

Database Commands

COMMAND GROUP	SUB COMMAND	DESCRIPTION
20	01	Get number of groups (genres) in the database

20		ESCX20010010002**xx**
		
		xx = which list to get groups from, where
		    01 = System Music Groups
		    02 = User Music Groups
		    03 = System Radio Groups
		    04 = User Radio Groups
		
		Reply Format: ESCX20010010004**xxxx**,
		Where **xxxx** = total number of groups in the specified list
		
		Once the total number of groups is known, you can ask information for a range of groups using the **02** subcommand

20	02	Get group information

20		ESCX20020030002**aa**0004**bbbb**0004**cccc**
		
		aa = which list to get groups from, where
		    01 = System Music Groups
		    02 = User Music Groups
		    03 = System Radio Groups
		    04 = User Radio Groups
		bbbb = starting group number
		cccc = ending group number

20		*Reply Format*: ESCX2002**xxx**GROUP1GROUP2etc…, Where **xxx** = total number of groups multiplied by 2, Each group is made up two items so
20		GROUP1 above = 0003**xxxyyyyzzzzzzzz** where 0003 = length of item #1 (always 3) **xxx** = number of titles in the group **yyyy** = length of item #2 (length of group name) **zzzzzzzz** = group name (length depends on **yyyy**) GROUP2, etc… have the same format as GROUP1

20	03	Get title (music or movie) or station (radio) information (includes Playlists because they are virtual CD titles)

20		ESCX20030040002**aa**0004**bbbb**0004**cccc**0004**dddd**
		aa = which list to get groups from, where
		    01 = System Music Groups
		    02 = User Music Groups
		    03 = System Radio Groups
		    04 = User Radio Groups
		bbbb = group number to get titles for
		cccc = starting title number
		dddd = ending title number

		Reply Format: ESCX2003**xxx**TITLE1TITLE2etc…, Where **xxx** = total number of titles multiplied by 2, Each title is made up of two items so
		TITLE1 above = 0003**xxxyyyyzzzzzzzzzz** 0003 = length of item #1 (always 3) **xxx** = number of tracks in the title (0 for Radio) **yyyy** = length of item #2 (length of title) **zzzzzzzzzz** = title/radio station(length depends on **yyyy**) TITLE2, etc… have the same format as TITLE1
20	04	Get track information

20		ESCX20040050002**aa**0004**bbbb**0004**cccc**0004**dddd**0004**eeee**
		aa = which list to get groups from, where
		    01 = System Music Groups
		    02 = User Music Groups
		bbbb = group number to get tracks for
		cccc = title number to get tracks for
		dddd = starting track number
		eeee = ending track number

		Reply Format: ESCX2004**xxx**TRACK1TRACK2etc…, Where **xxx** = total number of tracks, Each TRACK is made of one item so

		TRACK1 = **bbbbzzzzzzz**
		   yyyy = length of track name
		   zzzzzzz = track name (length depends on **yyyy**)
		 TRACK2, etc… have the same format as TRACK1

20	05	Play music track/radio station/Playlist

20		ESCX200500040002**aa**0004**bbbb**0004**cccc**0004**dddd**
		   aa = which database to get groups from, where
		     01 = System Music Groups
		     02 = User Music Groups
		     03 = System Radio Groups
		     04 = User Radio Groups
		   bbbb = group number
		   cccc = title/station number
		   dddd = track number (ignored for radio)

20	06	Get group number for a specific music or radio genre by name.

20		ESCX200600020002**aa**0004**bbbb**
		   aa = which list to get groups from, where
		     01 = System Music Groups
		     02 = User Music Groups
		     03 = System Radio Groups
		     04 = User Radio Groups
		   bbbb = which group you want the number for
		   0004 is the length of the group name

20		01 - System Music group name examples are: All, Playlists, CDs, MP3s

20		02 -User Music group name examples are:
		Blues/Folk
		Classical
		Country
		Dance
		Easy Listening
		Family
		HipHop-Rap
		Jazz
		Latin
		New Age
		Other
		Pop
		R&B/Soul
		Rock
		Soundtracks
20		03 - System iRadio group name examples are:
		All, NetRadio

20		04 - User iRadio group name examples are:
		    Alternative
		    Classic Rock
		    Classical
		    Country
		    Eclectic
		    Hip Hop
		    Holiday
		    International
		    Jazz
		    New Age
		    Oldies
		    R&B
		    Religious
		    Soft Rock
		    News/Talk
		    Top 40
		    Rock
		    Other

20		*Reply Format*: ESCX20060010004**xxxx**, Where **xxxx** = group number for the group specified by aaaa
20		Once group number is known, use the **02** subcommand for info.
20	07	Get title (music or movie) or station (radio) information by name (includes Playlists also, because they are virtual CD titles). Partial strings can be used. Case does not matter.

20		ESCX20070030002**aa**0004**bbbb**0004**cccc**
		aa = which list to get groups from, where
		01 = System Music Groups
		02 = User Music Groups
		03 = System Radio Groups
		04 = User Radio Groups
		bbbb = group number to get titles for
		cccc = which title/station/Playlist you want the number for
		0004 is the length of the title/station/Playlist name
		Reply Format: ESCX2007**xxx**TITLE1TITLE2etc…,
		Where **xxx** = total number of titles/station/Playlists that match
		Multiplied by 2, each title is made up of two items so
		TITLE1 above = 0003**xxx**0004**yyyy**
		0003 = length of item #1 (always 3)
		xxx = number of tracks in the title/station/Playlist (0 for Radio)
		0004 = length of item #2 (always 4)
		zzzz = title/station/Playlist number
		Most likely only one title will be returned for this command,
		however if you have duplicate titles,
		TITLE2, etc… have the same format as TITLE1
		Once the title/station/Playlist number and the number of tracks are known you can use the 04 – Get track information command or the 05 – Play music track/radio station/Playlist command.

Status Commands

COMMAND GROUP	SUB COMMAND	DESCRIPTION
50	01	Get power state

50		ESCX50**01** *Reply Format*: ESCX50010010003**xxx**, Where **xxx** = a 3 character string 　"ON " if power on 　"OFF" if power is off (standby mode)
50	02	Get music play mode
50		ESCX50**02** *Reply Format*: ESCX50020010002**xx**, Where **xx** = music play mode, where 　01 = normal 　02 = repeat track 　03 = repeat title 　04 = repeat group 　05 = random title 　06 = random group
50	03	Get sort order [future implementation]
50		ESCX50**03** *Reply Format*: 'ESCX50030010002**xx**, Where **xx** = guide sort order, where 　01 = by artist 　02 = by title 　03 = by song
50	04	Get current playing artist, title, song [future implementation]

50		ESCX50**04** *Reply Format*: 'ESCX5004003**aaaabbccccddeeeeff**, where **aaaa** = length of the artist name that is playing **bb** = artist name – length depends on **aaaa** **cccc** = length of the title that is playing **dd** = music title – length depends on **cccc** **eeee** = length of the song that is playing **ff** = song title – length depends on **eeee**
50	05	Get current screen that is displayed in the GUI [future implementation]

50		ESCX50**05**
		
		Reply Format: 'ESCX50050010002**xx**,
		Where **xx** = current GUI screen, where
		    01 = guide
		    02 = player
		    03 = options
		    04 = configuration

Control Commands

COMMAND GROUP	SUB COMMAND	DESCRIPTION
70	01	Select guide source

70		ESCX70010010002**xx**
		xx = guide source, where
		    01 = Music
		    02 = iRadio
		    03 = Movies

70	02	Register for unsolicited events (by default you are registered to receive the unsolicited events for level 5)

70		ESCX70**02**
		ESCX70**02**0010002**xx**
		    xx = event level, where
		        05 = All events except 1-second updates while playing
		        10 = All level 5 events, plus one-second track playing time
		            updates during music play
		
		If the short version of the command is used, event level 5 will be used as the default level.

70	03	Unregister for unsolicited events (prevent unsolicited events)
70		ESCX70**03**
70	04	Set Music Play Mode

70		ESCX70040010002**xx**
		    xx = music play mode, where
		        01 = normal
		        02 = repeat track
		        03 = repeat title
		        04 = repeat group
		        05 = random title
		        06 = random group

Note that when the host is in power standby mode, any command will cause the unit to enter the power on mode before executing the command. There are two exceptions to this: a client may register and unregister for unsolicited events without turning the host on, and the Status Command "Get Power State" (ESCX5001) will return the current state of the unit without turning it on.

Appendix E - FireBall Internet Connections

When Does FireBall Connect To Internet?

E

When Does FireBall Connect To Internet?

FireBall is designed to automatically connect and disconnect from the Internet as needed. Dialup modem Internet connections will automatically disconnect 2.5 minutes after a period of network inactivity. The following is a list describing when Internet connections occur:

Quick Start:
During the initial quick start process – an Internet connection status dialog and progress indicator are provided to show the status of the connection and registration process.

CD Lookup:
Each time a CD is inserted in the Front Panel CD drive, each time a CD Player door is opened and closed and a new disc is found, or whenever the user performs a Quick Lookup, Lookup Range, or Lookup All from Setup, FireBall will automatically connect to the OpenGlobe server in order to retrieve disc information and cover art. The status of the connection and the status of the information retrieval is displayed in the lower left portion of the Music Player screen.

Power Loss:
When Power is lost and then restored, FireBall automatically dials out and retrieves the correct time.

Music Option – Get Music Info:
If this Option is selected, FireBall will show an information screen that shows the number of changers attached, number of discs, free music slots, and unknown discs. If you press 'select' to continue the Get Music operation, FireBall will automatically connect to the Internet and lookup the unknown discs. A progress screen is displayed during this operation.

Music Option - Edit Disc – Lookup This Disc/Cover:
If this Option is selected, FireBall will automatically connect to the Internet to lookup the selected disc. A progress screen is displayed during this operation.

iRadio:
Each time an iRadio Station is selected, FireBall will automatically connect to the Internet to begin streaming the audio. The status of the connection followed by the audio streaming bit rate are displayed in the lower left portion of the iRadio Player. The Internet radio stream can be manually terminated by pressing STOP.

OpenGlobe CE-Commerce:
Each time you press the "OG" (OpenGlobe) button on the remote or keyboard, an Internet connection is automatically established with the OpenGlobe service – unless a connection had previously been established.

Weekly Updates:
FireBall automatically connects to the OpenGlobe servers each week to check for software updates. This connection occurs even if FireBall is in Standby. A progress screen is provided in case FireBall is turned on and it is updating the software. Most connections occur in the background, and you won't notice them.

Appendix F - Enhanced Entertainment Services

F

Enhanced Entertainment Services using Escient's OpenGlobe Services

Enhanced Entertainment Services Using Escient's OpenGlobe Services

Escient provides Entertainment Services that are noted under the name of OpenGlobe™. These are provided to you within your FireBall™ to expand your music experience.

The OpenGlobe area is an area within your FireBall user interface that provides additional content or information related to the music you have stored on, or are listening to on your FireBall.

For example, while listening to a CD or navigating through the onscreen music guide, you can simply press the OG button on your remote, keyboard or an optional touch screen, and immediately move to the OpenGlobe page on the Internet that contains a list of the week's top CDs in your favorite categories.

Or, you might want to access the latest info on one of your favorite artists and see their musical influences or read their biography.

As these services evolve, and new services are featured, you will be able to take advantage of the latest entertainment services offerings to enhance your music listening experience. You can purchase CDs now, and at some point, we hope to expand on these services to perhaps even offer the ability to download music, rather than having to wait for them in the mail.

As new services, peripherals, ISPs, applications, and user interface software are developed, FireBall will access the updated software via the Internet connection, and provide you with the most current services and software. (Software is downloaded to your system automatically during regularly scheduled connections so you always have the latest software. You must be "connected" for this to occur.)

Appendix G - Home Networking

What is Home Networking?
Setup Diagrams - Single FireBall on a Network
Home Networking Multiple FireBalls
Setup Diagrams - Multiple FireBalls on a Network

G

What is Home Networking?

A network is a group of computers, printers, and other devices that are cabled together in specific ways so that information can be exchanged and shared with each other. Just as you can connect two computers to share files or use the same connection to the Internet, you can connect FireBall(s) to a home network so that you can share the digital music contained on each unit.

Home networks are relatively easy to set up and installation tutorials are readily available on the Internet. Basically there are three popular kinds of home networks: Ethernet, wireless (802.11) and HomePNA (HPNA). Each of these home networking standards require different boards or adapter installed on your PC(s), associated software, and cables to connect.

In an Ethernet configuration, Ethernet network interface boards are installed on your PC(s) and Ethernet cables are used to connect all equipment. In order to connect a FireBall to an Ethernet home network, contact Escient to acquire an HPNA to Ethernet bridge/router such as the Escient Broadband Kit.

The FireBall E model contains built-in Ethernet capabilities.

Setup Diagrams - Single FireBall on a Network

If you have a single FireBall, attaching a FireBall to your home network is strictly done for the purpose of sharing access to the internet through one connection: a dial up, an HPNA network, or an Ethernet connection. Diagrams for each of these scenarios follows:

SINGLE FIREBALL: DIAL-UP

This manual provides basic setup diagrams for integrating FireBalls into a home network.

For additional configurations or advanced setups, please check the Escient website at www.escient.com.
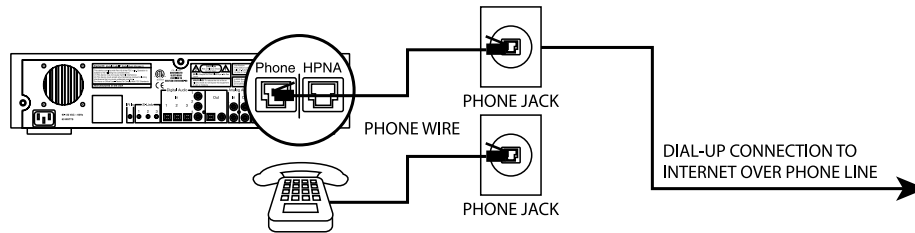
NOTE: Plug your FireBall directly into a wall mounted telephone outlet. Do not use a phone line splitter because it may cause connection problems.

If you currently have a home network (Ethernet or HomePNA), the following pages contain several **basic setup diagrams** for integrating a FireBall or multiple FireBall(s) into your particular home network scenario. This allows you to share FireBall's entertainment features while also sharing Internet access through your HomePNA enabled PC.

SINGLE FIREBALL NETWORK: HPNA
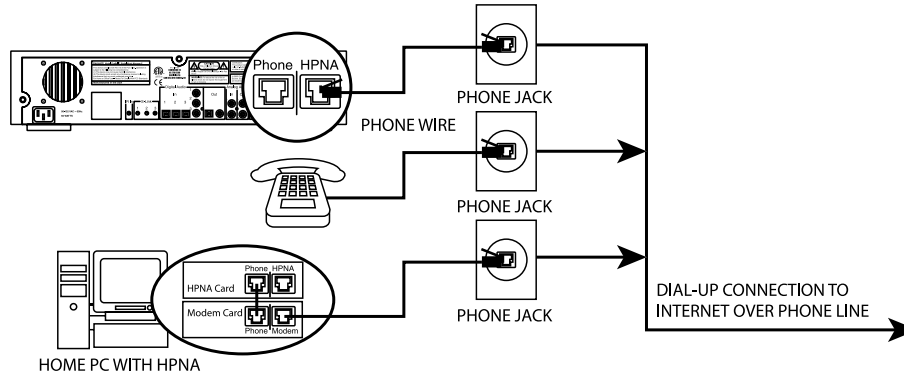
HPNA, also referred to as HomePNA, is a home networking standard developed by the Home Phoneline Networking Alliance.

HPNA phone cable lengths:
HPNA is designed to run in various configurations including "bridge" or "star" or a mix of these. The best rule on cable length is to follow HPNA standards, which specifies a maximum distance of 500 and a minimum of 6 feet between devices. HPNA is also what is known as a "rate adaptive technology". This means that the length of the cable may affect the speed of the devices connected.

FireBall can operate on any standard Ethernet network. Most Ethernet networks are connected together using a device called a "router", "hub", or "personal gateway". If you are planing on using FireBall on an Ethernet network along with other computers or devices, you will need one of these devices. Please contact your Escient dealer or the Escient website for more information.
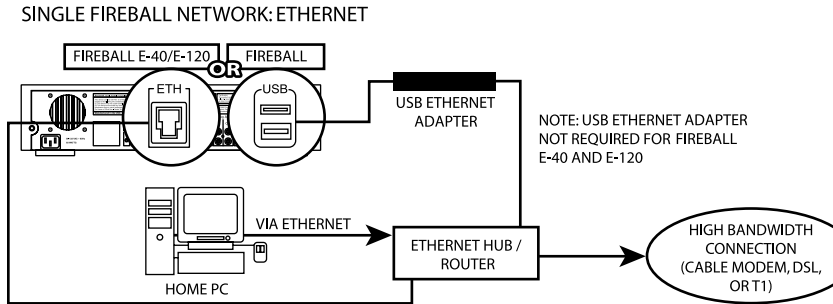
In order to connect FireBall to an Ethernet home network, you will need a supported USB to Ethernet adapter or an HPNA to Ethernet bridge such as the Escient Broadband Kit.

Contact your Escient dealer for more information.

FireBall E contains built-in Ethernet capabilities.

SINGLE FIREBALL NETWORK: ETHERNET

FIREBALL E-40/E-120   FIREBALL
OR
ETH   USB
USB ETHERNET
ADAPTER
NOTE: USB ETHERNET ADAPTER
NOT REQUIRED FOR FIREBALL
E-40 AND E-120

VIA ETHERNET
HOME PC
ETHERNET HUB /
ROUTER

HIGH BANDWIDTH
CONNECTION
(CABLE MODEM, DSL,
OR T1)

Home Networking Multiple FireBalls

You can connect a total of 5 FireBall(s) together on a home network. This provides a way to achieve multi-zone, multi-user support. Each FireBall can be given a user friendly name such as "Kitchen" or "Dad's Music" through the SETUP menu. In addition, each user of a particular FireBall has access to the digital music (MP3 files) on the other FireBall(s) on the network.

Following is a listing of functionality available to you on a networked FireBall. (In this context "on-line" means a FireBall that is connected to the same local network and powered ON. It does not mean "connected to the Internet".)

- Add up to 5 FireBalls to your network
- Ability to have discrete control and user interface for each FireBall (user/zone).
- See, play, edit, interact with MP3 music located on the other networked FireBalls.
- Stream MP3 music from one FireBall to another.
- Temporarily Connect, Disconnect, and Reconnect FireBalls from the local network.
- Permanently Disconnect from a networked FireBall to remove remote music content.

If a FireBall is permanently removed from the network, you can go to SETUP->UTILITIES->DISCONECT OFFLINE FIREBALLS to have that FireBall's media removed. Otherwise, the music titles from that FireBall will remain in the guide awaiting the reattachment.

- Record music locally and have it be accessible from remote FireBalls.

- Delete MP3 and WAV files from any local or on-line remote FireBalls.

- Add music to a Playlist from any local or on-line remote FireBall.

- Browse and Play MP3s and WAV files from any local or on-line remote FireBall.

- Remove remote titles from the local Music Guide.

- Encode music on all FireBalls simultaneously.

- Have edits/deletes/additions from remote FireBalls automatically show up on all connected FireBall systems.

Setup Diagrams - Multiple FireBalls on a Network

The following pages contain setup diagrams for connecting multiple FireBalls onto an HPNA or Ethernet network. If you have Broadband capability such as Cable Modem or DSL, configuration diagrams for these setups are also included.

The "select a cover" and "search for cover" options are not available for music on a remote FireBall.

Multiple FireBalls can connect to the Internet through a PC. The PC connects to the Internet using it's modem and shares the connection with the FireBalls using the HPNA network.
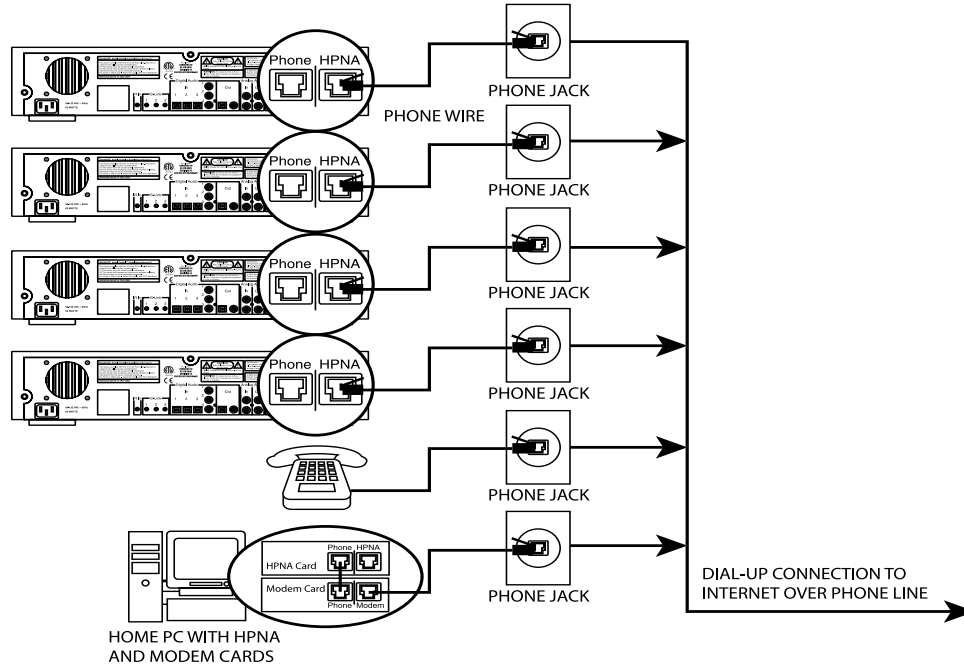
An HPNA connector is built-in on all FireBall models and available on the back panel.

Phone HPNA

PHONE JACK

PHONE WIRE

Phone HPNA

PHONE JACK

Phone HPNA

PHONE JACK

Phone HPNA

PHONE JACK

PHONE JACK

Phone HPNA

HPNA Card

Modem Card

Phone Modem

PHONE JACK

DIAL-UP CONNECTION TO INTERNET OVER PHONE LINE

HOME PC WITH HPNA AND MODEM CARDS

Multiple FireBalls can connect to the Internet through an Ethernet hub/router and a broadband connection such as a Cable Modem, DSL, ISDN, or T1.

ETHERNET MULTIPLE FIREBALL WITH BROADBAND

FIREBALL E-40/E-120   FIREBALL

OR

ETH   USB

USB ETHERNET
ADAPTER

ETH   USB

USB ETHERNET
ADAPTER

ETH   USB

USB ETHERNET
ADAPTER

NOTE: USB ETHERNET ADAPTER
NOT REQUIRED FOR FIREBALL
E-40 AND E-120

ETH   USB

USB ETHERNET
ADAPTER

VIA ETHERNET

ETHERNET HUB /
ROUTER

HIGH BANDWIDTH
CONNECTION
(CABLE MODEM, DSL
OR T1)

HOME PC
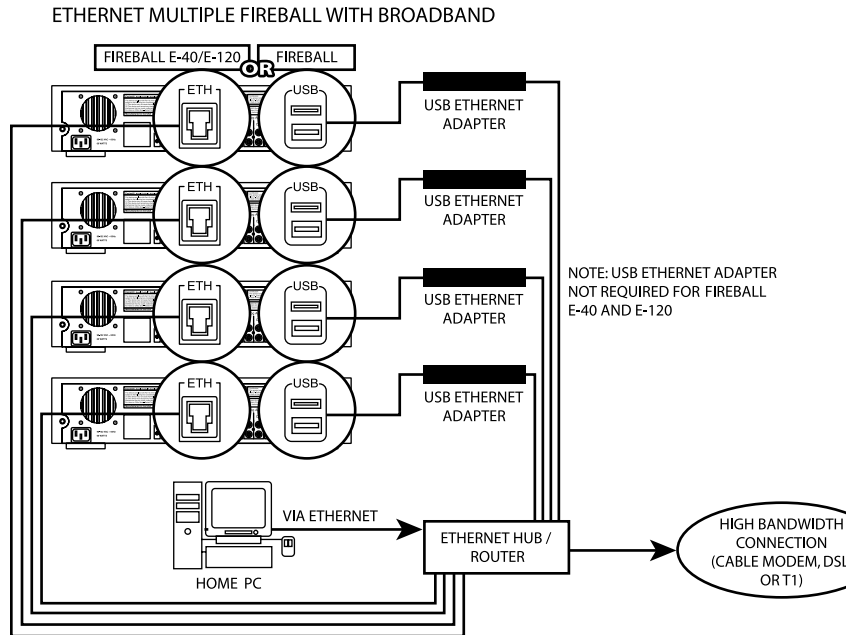
In order to connect FireBall to an Ethernet home network, you will need a supported USB to Ethernet adapter.

Please contact your Escient dealer to obtain an adapter.

FireBall E has built-in Ethernet and does not require an adapter.

Multiple FireBalls can connect to the Internet using an HPNA to Ethernet Bridge then connecting through an Ethernet hub/router and a broadband connection such as a Cable Modem, DSL, ISDN, or T1.

ETHERNET / HPNA MULTIPLE FIREBALL WITH BROADBAND
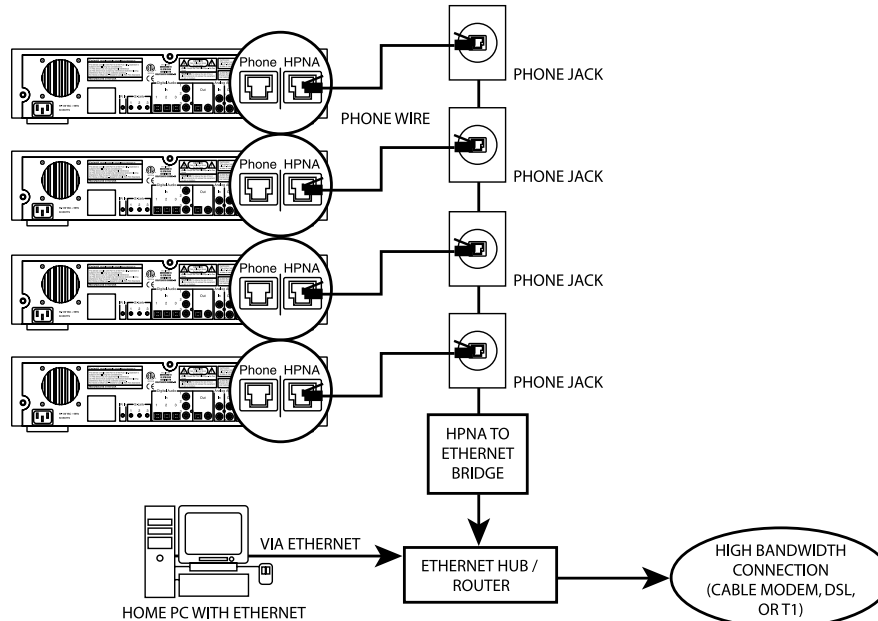
An HPNA connector is built-in on all FireBall models and available on the back panel.

Appendix H - Remote Control

Installing Batteries Into Remote
Programming the Remote
Programming TV/VCR Combo
Searching for Your Code
Checking the Codes
Re-Assigning Device Keys
Changing Volume Lock
Manufacturer's IR Codes

H

Installing Batteries Into Remote

1. On the back of the Remote, push the tab and remove the battery cover.
2. Obtain two (2) fully-charged AA alkaline batteries. Match the + and – marks on the batteries to the + and – marks in the battery case, then insert the new batteries.
3. Press the battery cover back into place. The tab should click when the cover is locked.
4. Test the unit by pressing any key on the remote. If the batteries are inserted correctly, the LED will blink each time you press a key.

Programming the Remote

The Remote can control up to 8 different components. Note that 3 of these are already reserved for Escient's FireBall, TuneBase 200, and PowerPlay products. Perform the following instructions for each component you want controlled:

1. Turn on a component (e.g., VCR) and, if applicable, insert media, (e.g., cassette or disc). NOTE: Please read steps 2-4 completely before proceeding. We recommend highlighting or writing down the codes and device you wish to program before moving onto step 2.

2. On the Remote, press a component key once (i.e., AUX, CBL, DVD, TV, RCV). Press and hold CODE SET until the LED blinks twice, then release.

3. Use the Manufacturer's Codes (last section in this appendix) to locate the type of component and brand name and then enter the first four-digit code for your component. If performed correctly, the LED will blink twice.

When batteries need replacement, the Remote will blink twice with every key press. Simply replace them and the remote control will be restored to its full functionality, including favorite settings.

If the LED did not blink twice, then repeat steps 2 through 3 and try entering the same code again.

4. Aim the Remote at the component and press PWR once. It should turn off. If it does not respond, repeat steps 2-3, trying each code for your brand until you find one that works. If the device does not have a PWR key, press PLAY.

5. Repeat steps 1 through 4 for each component you want the Remote to control.

Programming TV/VCR Combo

1. Turn on the TV/VCR Combo and insert a video cassette. NOTE: Please read steps 2-4 completely before proceeding. We recommend highlighting or writing down the code for the brand you wish to program before moving onto step 2.

2. On the Remote, press DVD. Press and hold CODE SET until the LED blinks twice, then release CODE SET.

3. Use the Setup Codes For TV/VCR Combos (last section in this appendix) to locate the brand name and then enter the first four-digit code for your component. If performed correctly, the LED will blink twice. NOTE: If the LED did not blink twice, then repeat steps 2 through 3 and try entering the same code again.

4. Aim the Remote at the component and press PWR once. It should turn off. If it does not respond, repeat steps 2-3, trying each code for your brand until you find one that works. If it still does not work, try searching for the code (see Searching For Your Code). NOTE: If the device does not have a PWR key, press PLAY.

5. If you've located a setup code that works, but it has a separate TV code, you'll also need to program it into the Remote to access volume control as follows:

   a. Press TV once. The LED will blink twice.

   b. Enter the TV code for your TV/VCR Combo. If correct, the LED will blink twice.

If there is no separate TV code listed, you will need to perform the following steps to access volume control:

   a. Press and hold CODE SET until the LED blinks twice, then release CODE SET.

   b. Enter 9 - 9 - 3 . The LED will blink twice.

   c. Press DVD once. The LED will blink twice.

Searching for Your Code

If your device does not respond to the Remote after trying all codes listed for your brand, or if your brand is not listed at all, try searching for your code. For example, to search for a code for your TV:

1. On the Remote, press TV once.

2. Press and hold CODE SET until the LED blinks twice, then release CODE SET .

3. Enter 9 - 9 - 1. The LED will blink twice.

4. Aim the remote control at the TV and slowly alternate between pressing PWR and TV. Stop when the TV turns off. NOTE: In the search mode, the Remote will send IR codes from its library to the selected device, starting with the most popular code first.

5. Press CODE SET once to lock in the code.

6. To search for the codes of your other components, repeat steps 1 through 5, but

substitute the appropriate key (i.e., AUX, CBL, DVD, RCV) for the (Auxiliary, VCR, Cable, Satellite, CD, Amplifier, or Tuner) component you are searching for.

Checking the Codes

If you have set up the Remote using the Searching For Your Code procedure, you may need to find out which four-digit code is operating your equipment.

For example, to find out which code is operating your TV:

1. On the Remote, press TV once.
2. Press and hold CODE SET until the LED blinks twice, then release CODE SET .
3. Enter 9 - 9 - 0. The LED will blink twice.
4. To view the code for the first digit, press 1 once. Wait 3 seconds, count the LED blinks (e.g., 3 blinks = 3) NOTE: If a code digit is "0", the LED will not blink.
5. Repeat step 4 three more times for remaining digits. Use 2 for the second digit, 3 for the third digit, and 4 for the fourth digit.
6. To check for the codes of your other components, repeat steps 1 through 5, but substitute the appropriate key (i.e., AUX, CBL, DVD, RCV) component you are checking. As before, write down each four-digit code.

Re-Assigning Device Keys

The Remote can be set up to control a second TV or VCR, or any combination of eight home entertainment components. For example, to have the Remote control a TV, a Cable Converter, and two VCRs, you will need to reassign the unused AUX key to operate the second VCR as follows:

1. On the Remote, press and hold CODE SET until the LED blinks twice, then release CODE SET .

2. Enter 9 - 9 - 2. The LED will blink twice.

3. Press DVD once, then press AUX once.

4. The AUX key is now ready to be programmed for your VCR. See Programming Component Control. To reassign other device keys, repeat steps 1 through 4 by substituting the key sequence from the below chart for the most popular components:

To Re-Assign Key Sequence	Perform
TV as VCR key:	CODE SET - 9 - 9 - 2 - DVD - TV
TV as 2nd CBL key:	CODE SET - 9 - 9 - 2 - CBL - TV
TV as 2nd AUX key:	CODE SET - 9 - 9 - 2 - AUX - TV
TV as 2nd RCV/TNR key:	CODE SET - 9 - 9 - 2 - RCV - TV
TV as AMP key:	CODE SET - 9 - 9 - 2 - PP - TV
TV as CD key:	CODE SET - 9 - 9 - 2 - TB - TV
TV as SAT key:	CODE SET - 9 - 9 - 2 - FB - TV

You cannot re-assign the FB, TB, or PP keys.

However, the keys can be used in conjunction to re-assigning other device keys.

To Re-Assign Key Sequence	Perform
DVD as 2nd TV key:	CODE SET - 9 - 9 - 2 - TV - DVD
DVD as 2nd CBL key:	CODE SET - 9 - 9 - 2 - CBL - DVD
DVD as 2nd AUX key:	CODE SET - 9 - 9 - 2 - AUX - DVD
DVD as 2nd RCV/TNR key:	CODE SET - 9 - 9 - 2 - RCV - DVD
DVD as AMP key:	CODE SET - 9 - 9 - 2 - PP - DVD
DVD as CD key:	CODE SET - 9 - 9 - 2 - TB - DVD
DVD as SAT key:	CODE SET - 9 - 9 - 2 - FB - DVD
DVD back to DVD/VCR:	CODE SET - 9 - 9 - 2 - DVD - DVD
AUX as 2nd TV key:	CODE SET - 9 - 9 - 2 - TV- AUX
AUX as 2nd DVD/VCR key:	CODE SET - 9 - 9 - 2 - DVD - AUX
AUX as 2nd CBL key:	CODE SET - 9 - 9 - 2 - CBL - AUX
AUX as 2nd RCV/TNR key:	CODE SET - 9 - 9 - 2 - RCV - AUX
AUX as AMP key:	CODE SET - 9 - 9 - 2 - PP - AUX
AUX as CD key:	CODE SET - 9 - 9 - 2 - TB - AUX
AUX as SAT key:	CODE SET - 9 - 9 - 2 - FB - AUX
AUX back to AUX:	CODE SET - 9 - 9 - 2 - AUX - AUX

When a reassignment is done, the LED will blink twice to confirm your choice. At that time, you will need to program the Remote to control the new component (see Programming Component Control).

Changing Volume Lock

The Remote is set to control volume of a component through your TV while in the TV, VCR, Cable, or Satellite mode. However, in an Audio mode (i.e. RCV/TNR; AMP, CD), you have separate control of your audio component's volume.

If your TV is not remote controllable, or if you want volume to be controlled by a different component, you can change the Volume Lock setting to control a volume through a non-associated mode (e.g., through the cable in the TV mode).

To change Volume Lock to another mode:

1. On the Remote, press and hold CODE SET until the LED blinks twice, then release CODE SET .
2. Enter 9 - 9 - 3 and then press any mode key once (except TV). The LED will blink twice.
3. Now, whenever you press VOL +, VOL –,or MUTE, volume will be controlled by your mode choice.

To change Volume Lock back to the TV mode:

1. On the Remote, press and hold CODE SET until the LED blinks twice, then release CODE SET .
2. Enter 9 - 9 - 3 and then press TV. The LED will blink twice.
3. Now, whenever you press VOL +, VOL –, or MUTE on the Remote, volume will be controlled by your TV.

MANUFACTURER'S IR CODES
Setup Codes for TVs:
AOC 0030, 0019
Admiral 0093, 0463
Aiko 0092
Akai 0030
Alaron 0179
Ambassador 0177
America Action 0180
Ampro 0751
Anam 0180
Audiovox 0451,0180, 0092, 0623
Baysonic 0180
Belcor 0019
Bell & Howell 0154, 0016
Bradford 0180
Brockwood 0019
Broksonic 0236, 0463
CXC 0180
Candle 0030, 0056
Carnivale 0030
Carver 0054
Celebrity 0000
Cineral 0451, 0092
Citizen 0060, 0030, 0056, 0039, 0092
Concerto 0056
Contec 0180
Craig 0180
Crosley 0054
Crown 0180,0039
Curtis Mathes 0047, 0054, 0154, 0051, 0451, 0093,
0060, 0030, 0145, 0056, 0016, 0039,
0166, 0466, 1147, 1347
Daewoo 0451, 0019, 0039, 0092, 0623, 0624
Daytron 0019
Denon 0145
Dumont 0017,0019
Dwin 0720, 0774
Electroband 0000

Emerson 0154, 0236, 0463, 0180, 0282, 0178,
0019, 0179, 0039, 0177, 0623, 0624
Envision 0030
Fisher 0154
Fujitsu 0179
Funai 0180, 0179, 0171
Futuretech 0180
GE 0047, 0051, 0451, 0093, 0282, 0178,
0021, 0135, 1147, 1347
Gibralter 0017, 0030, 0019
GoldStar 0030, 0178, 0019, 0056
Gradiente 0053, 0056
Grunpy 0180, 0179
Hallmark 0178
Harley Davidson 0179
Harman/Kardon 0054
Harvard 0180
Hitachi 0145, 0056, 0151
Infinity 0054
Inteq 0017
JBL 0054
JCB 0000
JVC 0053
KEC 0180
KTV 0180, 0030, 0039
Kenwood 0030, 0019
LG 0056
LXI 0047, 0054, 0154, 0156, 0178
Logik 0016
Luxman 0056
MGA 0150, 0030, 0178, 0019
MTC 0060, 0030, 0019, 0056
Magnavox 0054, 0030, 0179
Majestic 0016
Marantz 0054, 0030
Matsushita 0250
Megatron 0178, 0145
Memorex 0154, 0250, 0463, 0150, 0178, 0056,
0016
Midland 0047, 0017, 0051, 0039, 0135

Minutz 0021
Mitsubishi 0093, 0150, 0178, 0019
Motorola 0093
Multitech 0180
NAD 0156, 0178, 0166
NEC 0030, 0019, 0056
NTC 0092
Nikko 0030, 0178, 0092
Onwa 0180
Optimus 0154, 0250, 0166
Optonica 0093, 0165
Orion 0236, 0463, 0179
Panasonic 0051, 0250
Penney 0047, 0156, 0051, 0060, 0030, 0178,
0021, 0019, 0056, 0039, 0135, 1347
Philco 0054, 0463, 0030, 0145, 0019
Philips 0054
Pilot 0030, 0019, 0039
Pioneer 0166
Portland 0019,0039, 0092
Prism 0051
Proscan 0047
Proton 0178, 0466
Pulsar 0017, 0019
Quasar 0051, 0250, 0165
RCA 0047, 0051, 0093, 0019, 0090, 0135,
1047, 1147, 1247, 1347
Radio Shack 0047, 0154, 0165, 0180, 0030,
0178,
0019, 0056, 0039
Realistic 0154, 0165, 0180, 0030, 0178, 0019,
0056, 0039
Runco 0017, 0030, 0603
SSS 0180, 0019
Sampo 0030, 0039
Samsung 0060, 0030, 0178, 0019, 0056
Samsux 0039
Sansei 0451
Sansui 0463
Sanyo 0154

Scimitsu 0019
Scotch 0178
Scott 0236, 0180, 0178, 0019, 0179
Sears 0047, 0054, 0154, 0156, 0178, 0179,
0056, 0171
Semivox 0180
Semp 0156
Sharp 0093, 0165, 0039
Shogun 0019
Signature 0016
Sony 0000
Soundesign 180, 0178, 0179
Squareview 0171
Starlite 0180
Supreme 0000
Sylvania 0054, 0030
Symphonic 0171
TMK 0178, 0056, 0177
Tandy 0093
Technics 0051, 0250
Technol Ace 0179
Techwood 0051, 0056
Teknika 0054, 0180, 0150, 0060, 0019, 0179,
0056, 0016, 0039, 0092
Telefunken 0056
Toshiba 0154, 0156, 0060
Totevision 0039
Vector Research 0030
Victor 0053
Vidikron 0054
Vidtech 0178, 0019
Wards 0054, 0165, 0030, 0178, 0021, 0019,
0179, 0056, 0016
White Westinghouse 0463, 0623, 0624
Yamaha 0030, 0019
Zenith 0017, 0463, 0016, 0092
Setup Codes for VCRs:
Admiral 0048,0209
Adventura 0000
Aiko 0278

Aiwa 0037, 0000
Akai 0041
America Action 0278
American High 0035
Asha 0240
Audiovox 0037
Beaumark 0240
Bell & Howell 0104
Brocksonic 0209
Broksonic 0184, 0121, 0209, 0002
CCE 0072, 0278
Calix 0037
Canon 0035
Carver 0081
Cineral 0278
Citizen 0037, 0278
Colt 0072
Craig 0037, 0047, 0240, 0072, 0271
Curtis Mathes 0060, 0035, 0041, 0162
Cybernex 0240
Daewoo 0045, 0278
Denon 0042
Dynatech 0000
Electrohome 0037
Electrophonic 0037
Emerex 0032
Emerson 0037, 0184, 0000, 0121, 0043, 0209, 0002, 0278
Fisher 0047, 0104
Fuji 0035, 0033
Funai 0000
GE 0060, 0035, 0048, 0240
Garrard 0000
Go Video 0526
GoldStar 0037, 0038
Gradiente 0000
HI-Q 0047
Harley Davidson 0000
Harman/Kardon 0081, 0038
Harwood 0072

Headquarter 0046
Hitachi 0000, 0042, 0041
Hughes Net. Sys. 0042
JVC 0067, 0041
Jensen 0041
KEC 0037, 0278
KLH 0072
Kenwood 0067, 0041, 0038
Kodak 0035, 0037
LXI 0037
Lloyd's 0000
Logik 0072
MEI 0035
MGA 0240, 0043
MGN Technology 0240
MTC 0240,0000
Magnasonic 0278
Magnavox 0035, 0039, 0081, 0000, 0149
Magnin 0240
Marantz 0035, 0081
Marta 0037
Matsushita 0035,0162, 0454
Memorex 0035,0037, 0048, 0039, 0047, 0240, 0000, 0104, 0209, 0046, 1162, 1262
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Mitsubishi 0048,0067, 0043
Motorola 0035, 0048
Multitech 0000,0072
NEC 0104, 0067, 0041, 0038
Nikko 0037
Noblex 0240
Olympus 0035
Optimus 0037, 0048, 0104, 0162, 0454, 1062, 1162, 1262
Orion 0184,0209, 0002
Panasonic 0035, 0162, 0225, 0454, 1162
Penney 0035, 0037, 0240, 0042, 0038
Pentax 0042
Philco 0035, 0209
Philips 0035, 0081

Pilot 0037
Pioneer 0067
Profitronic 0240
Proscan 0060
Protec 0072
Pulsar 0039
Quarter 0046
Quartz 0046
Quasar 0035, 0162, 0454, 1162
RCA 0060, 0035, 0048, 0240, 0042, 0149
Radio Shack 0000
Radix 0037
Randex 0037
Realistic 0035, 0037, 0048, 0047, 0000, 0104, 0046
Runco 0039
STS 0042
Samsung 0240, 0045
Sanky 0048, 0039
Sansui 0000, 0067, 0209, 0041, 0271
Sanyo 0047, 0240, 0104, 0046
Scott 0184, 0045, 0121, 0043
Sears 0035, 0037, 0047, 0000, 0042, 0104, 0046
Semp 0045
Sharp 0048
Shintom 0072
Shogun 0240
Singer 0072
Sony 0035, 0032, 0000, 0033
Sylvania 0035, 0081, 0000, 0043
Symphonic 0000
TMK 0240
Tatung 0041
Teac 0000, 0041
Technics 0035, 0162
Teknika 0035, 0037, 0000
Thomas 0000
Toshiba 0045, 0043
Totevision 0037,0240

Unitech 0240
Vector 0045
Vector Research 0038
Video Concepts 0045
Videosonic 0240
Wards 0060, 0035, 0048, 0047, 0081, 0240, 0000, 0042, 0072, 0149
White Westinghouse 0209, 0278
XR-1000 0035, 0000, 0072
Yamaha 0038
Zenith 0039, 0000, 0209, 0033
Setup Codes for TV/VCR Combos:
American High 0035 (for TV use 0051)
Brocksonic 0002, 0294,
Colt 0072
Curtis Mathis 0035 (for TV use 0051)
Daewoo 0045
Emerson 0002, 0294, 0479
Funai 0000
GE 0035 (for TV use 0051),
0060 (for TV use 0047),
0048 (for TV use 0093), 0240
Hitachi 0035 (for TV use 0051), 0000
HQ 0000
Lloyds 0000
MGA 0240
Magnavox 0081 (for TV use 0054),
0035 (for TV use 0051), 0000
Magnin 0240
Memorex 0037, 0162 (for TV use 0250)
Mitsubishi 0048 (for TV use 0093)
Orion 0002, 0294, 0479
Panasonic 0035 (for TV use 0051),
0162 (for TV use 0250)
Penney 0035 (for TV use 0051), 0240,
0162 (for TV use 0250)
Quasar 0035 (for TV use 0051),
0162 (for TV use 0250)
RCA 0060 (for TV use 0047),
0035 (for TV use 0051),

0048 (for TV use 0093)
Sansui 0000, 0479
Sanyo 0240
Sears 0000, 0037
Sharp 0048 (for TV use 0093)
Sony 0032 (for TV use 0000)
Symphonic 0000
Zenith 0000
Setup Codes for Cable Coverters:
ABC 0003,0008, 0014, 0017, 0007, 0011, 0013
Allegro 0153, 0315
Archer 0153, 0797
Bell & Howell 0014
Century 0153
Citizen 0153, 0315
Comtronics 0040
Contec 0019
Eastern 0002
Emerson 0797
Everquest 0015,0040
Focus 0400
Garrard 0153
Gemini 0015
General Instrument 0476, 0276, 0011, 0810
GoldStar 0144, 0040
Goodmind 0797
Hamlin 0020, 0259, 0009, 0034
Hitachi 0011
Hytex 0007
Jasco 0015, 0153, 0315
Jerrold 0003, 0012, 0476, 0276, 0014, 0015, 0011, 0810
Memorex 0000
Movie Time 0063
NSC 0063
Oak 0019, 0007
Optimus 0021
Panasonic 0000, 0107, 0021
Paragon 0000

Philips 0153
Pioneer 0144, 0533
Popular Mechanics 0400
Pulsar 0000
Quasar 0000
RCA 0021
Radio Shack 0015, 0315, 0797, 0883
Recoton 0400
Regal 0020, 0259
Regency 0002
Rembrandt 0011
Runco 0000
SL Marx 0040
Samsung 0144, 0040
Scientific Atlanta 0008, 0477, 0017, 0877
Signal 0015,0040
Signature 0011
Sprucer 0021
Starcom 0003, 0015
Stargate 0015, 0040, 0797
Starquest 0015
TV86 0063
Teleview 0040
Tocom 0012, 0013
Toshiba 0000
Tusa 0015
Unika 0153
United Artists 0007
Universal 0153, 0191
Viewstar 0063
Zenith 0000, 0525
Zentek 0400
Setup Codes for Satellite or DBS Receivers:
AlphaStar 0772
Chaparral 0216
Echostar 0775
Expressvu 0775
General Instrument 0627, 0361, 0869
HTS 0775

Hitachi 0819
Hughes Net. Sys. 0749
JVC 0775
Jerrold 0627, 0361
Magnavox 0724, 0722
Memorex 0724
Next Level 0869
Panasonic 0701
Philips 0724, 0722
Primestar 0627, 0361
RCA 0566, 0143, 0392, 0855
Radio Shack 0869
Realistic 0052
Sony 0639
Star Choice 0869
Toshiba 0790
Uniden 0724, 0722, 0052
Zenith 0856
Setup Codes for CD Players:
Aiwa 0157, 0124
Burmester 0420
California Audio Lab 0029
Carver 0157, 0179, 0437
DKK 0000
Denon 0003, 0873
Emerson 0305
Fisher 0179,0174
Garrard 0420, 0393
Genexxa 0032, 0305
Harman/Kardon 0157, 0173
Hitachi 0032
JVC 0072
Kenwood 0028, 0037, 0190, 0681, 0826
Krell 0157
LXI 0305
Linn 0157
MCS 0029
MTC 0420
Magnavox 0157, 0305
Marantz 0029, 0157, 0180

Mission 0157
NSM 0157
Nikko 0174
Onkyo 0101, 0868
Optimus 0000, 0032, 0179, 0305, 0037, 0420, 0145, 0468, 0437
Panasonic 0029, 0303
Parasound 0420
Philips 0157, 0626
Pioneer 0032, 0305, 0468, 0244
Proton 0157
QED 0157
Quasar 0029
RCA 0179, 0305, 0053, 0764
Realistic 0179, 0420, 0180
Rotel 0157, 0420
SAE 0157
Sansui 0157, 0305
Sanyo 0179
Scott 0305
Sears 0305
Sharp 0037, 0180, 0861
Sherwood 0180
Sony 0000, 0185, 0490
Soundesign 0145
Tascam 0420
Teac 0420, 0393, 0174, 0180
Technics 0029, 0303
Victor 0072
Wards 0157, 0053
Yamaha 0036, 0187
Yorx 0461
Setup Codes for DVD Players:
Harman/Kardon 0582
JVC 0558
Kenwood 0534
Magnavox 0503
Mitsubishi 0521
Onkyo 0503
Panasonic 0490

Philips 0503, 0539
Pioneer 0525, 0571
Proscan 0522
RCA 0522
Samsung 0573
Sony 0533
Technics 0490
Theta Digital 0571
Toshiba 0503
Yamaha 0490, 0545
Zenith 0503, 0591
Setup Codes for LD Players:
Denon 0059
Mitsubishi 0059
NAD 0059
Pioneer 0059
Sony 0193, 0201
Setup Codes for Cassette Decks:
Aiwa 0029, 0197
Carver 0029
Denon 0076
Harman/Kardon 0182, 0029
JVC 0244, 0273
Kenwood 0070
Magnavox 0029
Marantz 0029
Onkyo 0135, 0282
Optimus 0027, 0220
Panasonic 0229
Philips 0029
Pioneer 0027, 0220, 0099
Sansui 0029
Sony 0243, 0170, 0291
Technics 0229
Victor 0273
Wards 0027
Yamaha 0097, 0094
Setup Codes for Stereo Tuners
or Receivers:
ADC 0531

Adcom 0616
Aiwa 0158, 0189, 0121, 0405
Akai 0224
Capetronic 0531
Carver 0189, 0008, 0042, 0360
Casio 0195
Clarinette 0195
Curtis Mathes 0080
Denon 0004
Emerson 0424
Fisher 0042, 0219, 0360
Garrard 0463, 0424
Harman/Kardon 0110, 0189, 0891
JBL 0110
JVC 0074
Kenwood 0027, 0186, 0042, 0077
Koss 0424
LXI 0181
Linn 0189
Lloyd's 0195
MCS 0039, 0346
Magnavox 0531, 0189, 0195, 0391
Marantz 0039, 0189
Modulaire 0195
NAD 0320
Nakamichi 0097, 0347
Onkyo 0135
Optimus 0531, 0670, 0186, 0042, 0177, 0181, 0219, 0738, 0801, 1023
Panasonic 0039, 0309
Penney 0195
Philips 0189, 0391
Pioneer 0531, 0014, 0150, 0630, 0080, 1023
Quasar 0039
RCA 0531, 0054, 0346, 0360, 0530
Realistic 0195, 0163, 0181
Sansui 0189, 0346
Sanyo 0219, 0801
Scott 0163,0322
Sharp 0186

Sherwood 0491, 0502
Sony 0158, 0168, 0474
Soundesign 0670
Teac 0463, 0163
Technics 0039, 0309, 0208
Victor 0074
Wards 0158, 0014, 0189, 0080, 0054
Yamaha 0176, 0186
Yorx 0195
Zenith 0857
Setup Codes for Stereo Amplifiers:
Aiwa 0406
Carver 0269
Curtis Mathes 0300
Denon 0160
Harman/Kardon 0892
JVC 0331
Linn 0269
Magnavox 0269
Marantz 0269
Panasonic 0308
Philips 0269, 0892
Pioneer 0013, 0300
Sony 0220,0689
Technics 0308
Victor 0331
Wards 0013
Yamaha 0354
Setup Codes for Home Automation:
GE 0240
Lutron 0597
One For All 0167
Radio Shack 0240
Security System 0167
Universal X10 0167
X10 0167
Setup Codes for DBS Audio Services:
Aiwa 0010, 0159, 0404
Fisher 0052
Harman/Kardon 0477

JBL 0477
JVC 0073
Jerrold 0459, 0520
RCA 0056
Scientific Atlanta 0460
Sony 0010, 0159
Starcom 0459
Setup Codes for Video Accessories:
Archer 0160
GC Electronics 0160
Jebsee 0160
Rabbit 0081
Radio Shack 0160
TeleCaption 0171

Appendix I - Wireless Keyboard

I

Wireless Keyboad Basics
Programming the Keyboard to Control an Escient TuneBase
Programming the Keyboard to Control an Escient FireBall
Discrete IR key Combinations
Blank Keys

Wireless Keyboard Basics

The Escient wireless keyboard can be used to control FireBall and provides the ability to enter text more easily. It is a standard keyboard with specialized keys for use with FireBall.

Since the keys on this device are similar to keys on the remote, please refer to the Remote Overview. The only key that is different between the two devices is the SET key indicated below. It is used to set up the brand of device you want to control for each source. This key is used in conjunction with the Escient key to change the Escient product to be controlled between FireBall and TuneBase 200 (Default is FireBall).

Programming the Keyboard to Control an Escient TuneBase

The Escient wireless keyboard can be programmed to control not only the FireBall but also the Escient TuneBase. Follow these instructions carefully, to program the keyboard for the Escient TuneBase.

1) Press and Hold the "**SET**" button until the red LED flashes twice.

2) Slowly enter "**997**". The red LED should flash twice.

3) Press the blue "**CH-**" key on the left side of the keyboard until the red LED flashes four times.

4) Press the 'swoop' button (the one just to the right of the POWER button).

5) Press and Hold the "**SET**" button until the red LED flashes twice.

6) Slowly enter "**1162**".

The wireless keyboard should now control the Escient TuneBase.

Programming the Keyboard to Control an Escient FireBall
Follow these instructions carefully, to re-program the keyboard for the Escient FireBall

1) Press and Hold the "**SET**" button until the red LED flashes twice.

2) Slowly enter "**997**". The red LED should flash twice.

3) Press the blue "**CH-**" key on the left side of the keyboard until the red LED flashes four times.

4) Press the 'swoop' button (the one just to the right of the POWER button).

5) Press and Hold the "**SET**" button until the red LED flashes twice.

6) Slowly enter "**1163**".

The wireless keyboard should now control the Escient FireBall.

Discrete IR Key Combinations

Special key combinations are provided on the keyboard to supply third party IR control devices with discrete IR codes which can be used to directly navigate the user interface of the FireBall. This section describes those special key combinations.

Key Combination	Function
Shift+Music	Power On
Shift+iRadio	Power Off
Shift+Movies	Play Mode Normal
Shift+Menu	Play Mode Repeat Track
Shift+Title	Play Mode Repeat Title
Shift+Angle	Play Mode Repeat Group
Shift+Resume	Play Mode Random Title
Shift+Guide	Play Mode Random Group
Shift+Mode	Guide Screen On
Shift+Info	Player Screen On
Shift+Option	Cover View On
Shift+Next	Artist View
Shift+Setup	Title View
Shift+Random (not labeled)	Song View

Blank Keys

Some Escient wireless IR keybaords may not have special "modifier" keys labeled. These keys are used for "Playlist Hot Keys", "Discrete IR Key Combinations" and other special functions. . Please refer to this picture if your keyboard is missing the text labeling.

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